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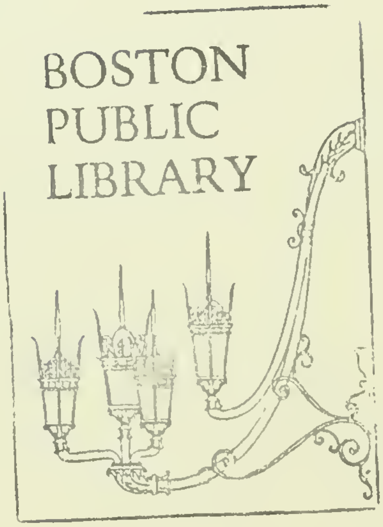

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Comprehensive Report on

SOUTH COVE PROJECT IMPROVEMENTS

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August 13, 1965

2405-5

SUBJECT: Boston Redevelopment Authority
South Cove Project R-92
Comprehensive Engineering Report

Boston Redevelopment Authority
20 Pemberton Square
Boston, Massachusetts 02108

Attention: Mr. Wallace B. Orpin, Chief Engineer

Gentlemen:

In accordance with our "Contract for Engineering Services" for the subject project, we transmit herewith 30 copies of the "Comprehensive Engineering Report" dated August 13, 1965.

Very truly yours,

CHAS. T. MAIN, INC.

By R.T. Colburn

R. T. Colburn
Vice President

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INTRODUCTION

The South Cove Project is located immediately south of the central business district and abuts the expanding business and commercial section of the Back Bay area. To the east and south the project is bounded and isolated, to some extent, by the J. F. Fitzgerald Expressway and the Massachusetts Turnpike. Within the project are local sections of commercial, retail, entertainment, institutional and residential areas. With the exception of institutional use, there has been no significant growth in recent years. In fact, deterioration and diminishing use of buildings and structures has occurred.

The center section of the South Cove Project was the first portion of the area to be developed. Essentially the land in the center section was in full use by the early portion of the 19th century. In the mid 19th century, the existing waterfront was filled and development extended east through the project area. Also, in the latter part of the 19th century the western section of the project was developed upon filled land in the Back Bay area. By the turn of the 19th century, the majority of the South Cove area was fully in use. It is interesting to note that a review of the dates of installation of present sewers can provide a realistic picture of development dates within each local area.

The essential elements of renewal plans for the project contemplate arresting the blighting conditions and revitalizing much of the present land uses. Rehabilitation of existing residential structures, new town house and apartment structures properly located will enhance and enlarge the two primary residential areas, the Bay Village and Chinatown communities. An open public plaza area in the central section will provide a pleasant environment with ready access to proposed new rapid transit facilities through a station located in the plaza.

Institutional expansion is contemplated in the Tufts-New England Medical Center and Don Bosco Technical School. Various new commercial and retail centers are planned in the area along Stuart-Kneeland Streets and throughout the project except for the western section. Parking facilities are planned in conjunction with the town house and apartment complex south of the public plaza and along Stuart-Kneeland Streets. Existing higher-class entertainment facilities will be retained. A new fire station will be built on Columbus Avenue.

Within the following pages, this report describes the necessary basic improvements to the streets and public utilities required for a comprehensive renewal program.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

A. General.

All conclusions and recommendations for improvements in the project area are based upon the proposed rehabilitation and renewal plan prepared by the Boston Redevelopment Authority. This report, complete with the accompanying drawings and recommendations, is intended to serve as a basis for the development of the project improvements during final execution.

B. Street Adjustments.

A visual survey of all existing streets reveals that the majority are in fair to poor condition with little evidence of recent reconditioning, except for Broadway and streets adjacent to the Massachusetts Turnpike.

The prime function of the north and south streets in the project is to conduct traffic to and from the busy Central Business District. There is considerable traffic congestion experienced on the major streets because of restrictive widths and poorly arranged intersections.

The proposed street adjustments in the renewal project includes the abandonment of unnecessary existing streets, the construction of new streets and the widening of various existing rights-of-way. The adjustments are required to improve traffic flow within and through the project and will result in creating new parcels suitable for the proposed land use changes.

Specific recommendations include:

1. The construction of all proposed new major and minor streets in accordance with accepted City of Boston standards.

2. The resurfacing of the majority of existing streets, as required, to provide first class wearing surfaces throughout the project area.

3. The reconstruction and widening of existing streets, as required to provide proper traffic flow.

4. The reconstruction of existing streets where extensive subsurface utility revisions are proposed.

All construction, reconstruction and resurfacing is proposed in accordance with the City of Boston Public Works Department Highway Division standards. For details of "Typical Street Construction and Alterations", see Appendix "B" Table 4.

C. Street and Park Lighting.

A complete visual survey of all street lighting in the project was conducted. The existing lighting system consists of a combination of wooden standards with top mounted fixtures and new concrete standards with cantilever fixtures. Most of the project area has wooden standards with inadequate intensities. These units, for the most part, are not properly spaced in accordance with present standards and streets are poorly lighted.

It is recommended that all obsolete standards and fixtures be removed and replaced by the new type, with suitable intensity and properly spaced, all in accordance with the City of Boston Public Works Department Lighting Division standards.

D. Parks and Public Areas.

Parks and public areas are planned as supporting facilities for the proposed diversified development. The proposed locations of these facilities will provide attractive areas for use by the occupants of the various communities in the project and transients to the commercial section. These areas present no significant problem for street adjustments and utility revisions proposed for the project. Provisions for access to the existing Tremont Street subway will be incorporated into the design of the public plaza.

E. Low Service Water.

The low service water system is the primary system in the project. It has the most complete coverage and is supplemented by the High Service Water and High Pressure Fire Service in the central section. The system supplies the largest amount of water for fire protection, domestic, commercial and industrial use. This system was installed between the late 1800's and mid 1920's. Water is supplied to the system from the M.D.C. feeder network which continues thru the South Cove Project to the Central Business District. It is recommended that the Low Service Water system be

retained and be modified, expanded or rebuilt in the renewal area as required to accommodate all proposed changes. To attain this it will be necessary to (1) install new lines in new and completely rebuilt streets (2) replace 60 year old piping in the Bay Village section because of the suspected condition, location and extensive utility reconstruction required in this area and, (3) cement line the existing 16" main in Kneeland and Washington Streets to assure maximum delivery of water to the renewal area. All recommendations are in accordance with the standards of the City of Boston Public Works Department Water Division which has jurisdiction of the system.

F. High Service Water System.

The existing High Service Water System within the renewal area is confined to the east central and west sections of the project. The intended function of this system is to supplement the low service water system by providing domestic water and fire protection to high rise and/or high population density structures. With the proposed renewal in the project this system becomes more critical as a supplement to the low service water system. The High Service system is supplied from M.D.C. high pressure feeder mains. It is proposed to expand the existing system to accommodate all existing and proposed high rise and/or high population density structures, except in the western section. The system proposed will be installed in a grid pattern to assure more even distribution.

There are no known defects in the existing system, therefore no replacement piping is proposed.

G. High Pressure Fire System.

The existing high pressure fire system provides protection for the congested value area in the center section of the project and is confined essentially to Washington Street, Tremont Street and Broadway.

It is proposed to expand this system to provide fire protection for the existing and proposed congested value area in the center section of the project only. New piping will be installed as required to develop a grid pattern for this system to assure maximum delivery and uniform distribution.

H. Surface Drainage and Sanitary Sewer Systems.

The present surface drainage and sanitary system in the project area are combined except the portion west of Berkeley Street and in Stuart Street, from Arlington Street to Clarendon Street. The existing system has three outflows, one at Hudson Street, one at Church Street and one at Berkeley Street. The system was installed between the mid 1800's and mid 1920's. Various types of construction common to the particular date of installation are incorporated in the system. The present system appears to be adequate to handle the existing flows. However, the proposed street adjustments and population increase involve extensive revisions to

the existing system to accommodate both surface drainage and sanitary waste. Therefore, the recommendations for this system includes (1) the construction of a new separate surface drainage system and (2) modification of the existing combined system as a separate sanitary sewer system. Because there are no major changes to the existing contours in the project the proposed new surface drainage system will have two outflows at the same general locations as the existing system.

H. Police Signal and Fire Alarm Systems.

The police signal system in the city is under the jurisdiction of the Boston Police Department, Signal Division. The Fire Alarm system in the city is under the jurisdiction of the Boston Fire Department, Fire Alarm Division. Both existing systems are considered by the respective governing agencies as adequate and in satisfactory condition. Modification, relocations and additions are recommended to each system to coincide with the proposed project development. The proposed system will provide adequate protection for the redevelopment project.

PROJECT COST SUMMARY

Code No.	ITEM	Total Cost Including Boundary St.	50% of Boundary St. Costs	Total Chrg. to Project incl. 50% of Boundary Streets
*R-224 (1)	Demolition and Site Clearance	$ 550,000.00	$ -	$ 550,000.00
R-224(2)	Street Adjustments	968,570.00	70,750.00	897,820.00
R-224(3)	Parks & Public Areas	188,000.00	-	188,000.00
R-224(4)	Street & Park Lighting	331,500.00	50,415.00	281,085.00
R-224(5)	High Service Water System	191,250.00	12,440.00	178,810.00
R-224(6)	Low Service Water System	189,380.00	23,535.00	165,845.00
R-224(7)	High Pressure Fire System	105,170.00	3,485.00	101,685.00
R-224(8)A	Surface Drainage System	407,030.00	71,740.00	335,290.00
R-224(8)B	Sanitary Drainage System	285,890.00	5,105.00	280,785.00
R-224(9) R-224(10)	Police Signal System) Fire Alarm System)	101,590.00	6,300.00	95,290.00
*R-224(11)	Traffic Control System	142,300.00	-	142,300.00
*R-224(12)	Street, Traffic & Directional Signs	13,000.00	-	13,000.00
	GRAND TOTAL	$3,473,680.00	$243,770.00	$3,229,910.00

*Estimates by Boston Redevelopment Authority

SEQUENCE OF CONSTRUCTION

The following review of construction sequence for the South Cove Project is based on information developed by the B.R.A. It is understood that the information is preliminary and will vary during the future execution phase of the project. We have limited our study of the construction sequence to general locations and major redevelopment parcels which will require the performance of major street relocation and/or alterations prescribed by the renewal plan.

In studying the proposed construction plans for the various locations, consideration has been given to (1) street reconstruction and traffic control, (2) changes and/or additions to all public utilities, (3) requirements for private utility relocations, and (4) construction to be performed by other public agencies in the area.

Locations, hereinafter discussed, are referred to by Disposition Parcel numbers and description titles, if applicable. Disposition Parcel numbers were obtained and are located as shown on the B.R.A. drawing entitled "Disposition Plan", South Cove Urban Renewal, Map 5". Estimated dates for start of construction as received from the B.R.A. are summarized as follows:

Disposition Parcel	Other	Estimated Start of Construction
R2, R-2a, P-16	Bay Village Utilities	Spring, 1966
P2 to P11, inclusive		Spring 1966-Spring 1970
P-12, C-3	Charles St. Extension	Fall, 1966
P-14, P-14a, P-15, C-1		Spring, 1967
C-2 and P-13		Fall, 1967
R-4, R-6, R-6a, R-7 and R-7a		Spring, 1968
R-3, R-3a, R-5		Spring, 1968-Fall, 1970
R-1		Summer, 1968
P-1		Spring, 1969

Area I - (Parcel Nos. R-4, R-5, P-12 to P-15 Incl.)

Area I includes the Public Plaza, Don Bosco Technical High School and development therefrom immediately south to the Massachusetts Turnpike. This area, located in the south central part of the project, encompasses a major part of the redevelopment for the project. In addition, much of the street and utility redevelopment (private and public) is involved in this area. As a result, the construction sequence in this area is the most involved and presents the most complicated scheduling problems.

Prior to initiating construction on parcels in Area I, the following items must be accomplished:

1. The proposed fire station located on Columbus Avenue must be constructed and operating such that the present fire station on Broadway can be abandoned.

2. Major public utility facilities must be relocated to proposed

new locations in the entire area, especially those which are required for service outside the immediate area.

3. Streets within the development area must be abandoned. Broadway, the principal street to be abandoned, will require temporary traffic rerouting and should be left open from Tremont Street to Stuart Street.

4. Private utilities will require extensive relocation in this area. Principal mains and ducts which "pass through" the area and provide service outside must be relocated. Boston Edison has a 115 kv buried power cable in Broadway. It extends through the project to the substation on Carver Street. An alternate power cable must be provided in the adjusted street alignments before the present cable can be removed. This is a time-consuming operation. Such cable replacement could require from one to two years to place into operation.

5. The proposed MBTA Westwood rapid transit line is a major key to initiating construction in Area I. Before any parcel is developed, it is highly desirable to have the rapid transit tunnel section in place. Construction of Washington Street and other cross streets, including all public and private utilities, depend upon this tunnel section being completed. We believe that it will require from 1-1/2 to 2 years to complete the tunnel section after a final decision is reached concerning location and detail designs.

Due to the complexity and nature of the items that should be completed prior to the start of individual parcel development, we recommend the following sequence of development in Area I.

a. Complete MBTA rapid transit tunnel section from Stuart Street to Frontage Road.

b. Construct new streets and rebuild Washington Street entirely including installation of new public utility systems. Private utility work should be carried on concurrently with the public utility installation.

c. Begin renewal development in parcel areas as desired.

The development of the public plaza area should not be started until adjacent streets have been reconstructed.

The Area I development must be executed in close cooperation with the MBTA. When the exact subway alignment and detail designs are complete, parcel development could start on a limited basis in areas where there would be no conflict with subway construction. Street and utility construction still should be performed after the subway tunnel is completed in any specific area. To determine now which parcel this could occur on, or the approximate starting time of construction, depends upon indeterminate factors.

Bay Village Streets and Utilities

The reconstruction of utilities and streets in the Bay Village area must be in progress during the 1966 construction season to permit utility construction in Area I to progress properly, particularly the sewer systems. Construction should be accomplished first in streets where major utility lines exist, such as Church Street, and then expanded on an individual basis into other streets. Completion of the work as soon as practical is required to alleviate the inconvenience to residents. When completed, it will provide an improved basis for continuing rehabilitation work that has already been accomplished in this area.

Charles Street Extension and Parcel C-3.

While the new Charles Street Extension is being constructed, we recommended that Broadway be left open from Stuart to Tremont Streets to facilitate traffic flow in the area. This portion of Broadway passes through Parcel C-3 and would preclude the development of this parcel until Charles Street Extension is completed. Therefore, if Charles Street Extension is started in the Fall of 1966, we suggest the start of construction for Parcel No. C-3 be the Fall of 1967.

Parcels R-1 to R-3 and P-1 to P-11 Inclusive.

Parcels R-1 to R-3 inclusive, and P-1 to P-11 inclusive, do not present any significant problem relative to the overall development of the project improvements. These parcels are located generally in areas where proposed street adjustments are nominal. The proposed utility revisions in the streets adjacent to the parcels should be constructed in conjunction and coordinated with the particular parcel development with one exception.

The proposed new surface drainage collector main in Harrison Avenue and Harvard Street connects to the Hudson Street outflow. The mains in streets adjacent to Harrison Avenue and the Frontage Road main connect to the Harrison Avenue collector main. The actual installation date of the Harrison Avenue and Harvard Street collector main will be governed by the construction timing of the parcels bordering Frontage Road.

Development of parcels R-1 to R-3 inclusive, and P-1 to P-11 inclusive, can be constructed independent of other development in the project with a minimum of work on public improvements. The construction starting time for the above parcels, suggested by the B.R.A. appears to be reasonable.

Street and Utility Construction Sequence.

The scheduled construction of the proposed street adjustments and the respective utility revisions is critical to the orderly development

of the project. The construction schedule for some of this work is governed by the order of development of specific parcels. However, certain work is required to maintain continuity of the utility systems and to provide a logical means for traffic control during the project execution, regardless of the order of parcel development. Listed below is some specific work required to assure these conditions.

1. Bay Village. There are proposed new surface drainage and sanitary system collector mains in this area. These mains continue through the area and connect to existing outflows. Sewers in the south central section of the project are serviced by these collector mains. Because of the prime importance of such mains, it is mandatory that they be constructed before development of the parcels in the south central section of the project. When construction starts in the Bay Village community, it is practical to complete all utility revisions and street rehabilitation proposed.

2. Major Streets. Before maximum development of parcels in the south central section of the project can be executed, Broadway from Tremont Street to Frontage Road, must be eliminated. To relieve the inevitable traffic problem created by the elimination of this portion of Broadway, Tremont Street, Washington Street and Shawmut Avenue should be widened and Oak Street extension constructed. Concurrent with this work all proposed pertinent utility revisions should be installed. To maintain continuity and allow for uninterrupted construction of both

private and public utilities in this area, a portion of the right of way for the Charles Street Extension should be cleared of existing structures. This area is located at the present intersection of Tremont Street and Broadway.

The major east-west streets, Stuart, Kneeland, and Frontage Road do not present any major problems relative to construction sequence of parcel development. The alterations proposed for these streets can be schedules during the latter stages of project construction. We suggest this work be accomplished when major north-south arteries are essentially complete.

3. Minor Streets. All minor streets in the project, exclusive of those in the Bay Village community, can be revised as proposed in conjunction and coordination with the development of adjacent parcels. In most of these streets the proposed utility revisions can be deferred until completion of the street is practical. Scheduling of work in these streets, should be deferred until more detailed plans concerning the order of development are known.

STREET ADJUSTMENTS

Street Arrangement. The existing streets in the project are poorly arranged. The major north-south streets are through streets to and from the busy Central Business District. The right of way of these streets are too narrow for the volume of traffic within this district. Broadway, a major street, passes through the area in a northwest-southeast direction, complicating the traffic pattern through the area and contributing much to the limited land use. The terminus of Carver Street at Broadway further complicates an undesirable arrangement at the junction of Broadway, Tremont Street and Shawmut Avenue.

The Bay Village and Chinatown residential sections have street arrangements acceptable to communities of this type with one exception, direct access from the adjacent major streets. As a result of this direct access, the residential streets are used by through traffic as alternates to avoid traffic congestion.

There are minor streets near the Don Bosco Technical School and the New England Medical Center that, because of their arrangement, will become unnecessary for general public use after the proposed expansion of these institutions. These streets restrict the orderly expansion of the institutions and will complicate traffic control in the area.

The streets in the western section of the project have a reasonable geometric pattern for handling traffic flows with the exception of Columbus Avenue. The northeast-southwest direction of this street contributes to poor traffic flow and possible congestion at the intersections with Arlington and Berkeley Streets. Although the renewal plan as it now exists contemplates no change to Columbus Avenue, we suggest that traffic be limited to local use by properly placed islands and traffic control devices.

Condition of Streets. A complete visual survey was made of all streets in the project to rate the actual condition. The results of this street condition survey is included as appendix "A" of this report. Records of the City of Boston Public Works Department, Highway Division, were reviewed to determine the construction features and to obtain a history of construction and maintenance. This information was incorporated in the "Street Condition Survey" report. Most streets in the project are in fair to poor condition with the exception of the recently resurfaced Broadway and streets adjacent to the Massachusetts Turnpike.

The criteria used for street rating is as follows:

GOOD: New pavement or old pavement with good line and grade and good wearing surface requiring no resurfacing.

FAIR: Some minor patches and few cracks, acceptable line and grade with no significant settlement.

POOR: Wearing surfaced patched and/or cracked, poor line and grade and/or pronounced settlement or any other deficiency requiring rebuilding or resurfacing.

Vertical and Horizontal Sight Distances. The general contours within the project present no vertical sight deficiencies. There are some locations at the intersection of major and minor streets where horizontal sight distance is questionable. This condition is most acute at the perimeter of the residential areas. In these areas where minor streets intersect major streets there are buildings located on each corner abutting the street right of ways. Such buildings limit the horizontal sight and create hazardous conditions on the major streets. The proposed street adjustments will relieve this condition.

Rights of Way. The existing rights of way of the minor streets are adequate for the proposed project changes. However, as previously stated, the major north-south through streets serving the Central Business District have inadequate rights of way for the volume of traffic.

Proposed Street Adjustments and Rehabilitation. The proposed street adjustments and rehabilitation program includes the following:

(1) Abandonment of some existing streets to form new parcels for development proposed.

(2) Reconstruction and widening of existing streets for traffic flow changes in the project and compatible with proposed land use changes.

(3) Construction of new streets to improve traffic flow and intersection arrangement.

(4) Reconstruction of existing streets where extensive utility changes are required.

(5) Resurfacing of existing streets to improve the substandard condition of the wearing surface.

The north-south traffic flow will pass through the project area using alternate one way major streets, except for Washington Street which is two directional within the renewal area. Major streets will be improved and widened to provide suitable connections to existing major arteries in adjacent areas.

One of the principal street changes proposed is the virtual elimination of Broadway which crosses diagonally through the project area connecting the Park Square area with Frontage Road. Between Piedmont and Fayette Streets, this street was retained as a collector street for the Bay Village residential area. The proposed Charles Street Extension corrects

the undesirable and inefficient arrangement at the intersection of Shawmut Avenue and Tremont Street. The boundary streets, Frontage Road and Stuart-Kneeland will be used principally to divert major east-west traffic from the internal portion of the project area. Other streets within the limits of the project are proposed as secondary streets to accommodate orderly cross traffic. A brief description of major artery construction is listed below:

Stuart-Kneeland Street Route. This route will be completely rebuilt between the intersection at Elliot St. and 150 ft east of Washington Street. A 4-foot median strip will be provided to properly channel traffic flow within the 95-foot right of way. Stuart Street will be resurfaced from Charles Street Extension to Berkeley Street on the existing right of way.

Frontage Road. Major reconstruction will be required in three locations, namely, (1) a new access connection from the Massachusetts Turnpike ramp near Hudson Street to provide the required traffic connection to Frontage Road, (2) between Arlington and Berkeley Streets to widen the existing right of way to 55-foot and to provide traffic channelization at the Arlington Street intersection and (3) a new section of street across the vacant triangular section of property between Berkeley and Columbus Avenue.

Charles Street Extension-Tremont Street Route. The section of Tremont Street between Frontage Road and Oak Street Extension will be rebuilt completely within the existing right of way, including the removal

of abandoned street car trackage. Charles Street Extension will follow the alignment of Carver Street, with an 80-foot right of way, from Stuart Street to the connection with Tremont Street.

Tremont Street-Shawmut Avenue Route. The section of Tremont Street and Shawmut Avenue from the existing Tremont Street Subway Entrance to Frontage Road will be completely rebuilt as a major street on an 80-foot right of way. The additional right of way on the west side of the street requires removal of the existing subway portal structure and replacement by a new portal structure consisting of retaining walls and a bridge deck. This will avoid land takings in the immediate area not required for new land use developments or for proper alignment with streets in the adjacent areas. At the Oak Street Extension and Frontage Road, increased curb radii will be used to improve the flow of right turn traffic at these intersections.

Washington Street. This street will be completely rebuilt and widened to an 80-foot right of way to improve the flow of two-way traffic through the project area. The street widening does not require land takings in addition to those required by new land use developments.

Oak Street Extension. A new street alignment will extend Oak Street from Washington Street to Charles Street Extension to provide (1) a major connecting link between the Tremont-Shawmut route and Charles Street Extension and (2) improved internal traffic flow.

Secondary Streets. Some street closures and minor intersection adjustments are proposed for Chinatown, Bay Village, and the entertainment district to provide access arrangements that would discourage through traffic and to facilitate parcel development. All existing right of ways, on which the New England Medical Center is the sole abutter, will be transferred to the Medical Center jurisdiction.

STREET AND PARK LIGHTING

General. The existing lighting in the project consists of a combination of wooden standards with top mounted fixtures and new concrete standards with cantilever fixtures. The new units have been installed in recent years in accordance with current standards of the City of Boston Public Works Department, Lighting Division, as a part of their program for upgrading the city lighting system. Most of the project is serviced by the old wooden type units, improperly spaced with inadequate intensities, resulting in poorly lighted streets. The power supply for the lighting system is provided through conduits and cables installed in the existing streets and serviced by the Boston Edison Company for the City of Boston.

Recommendations. With the proposed diversified development of the project, adequate lighting is mandatory. We recommend that all existing lighting that does not comply with current standards be removed. Such units are to be replaced by new units properly spaced for adequate illumination, all in accordance with the Boston PWD Lighting Division's standards. Custom designed light fixtures and standards should be selected to enhance the image of the various communities within the project, more specifically the public plaza and residential communities.

The revisions required to modernize the lighting in the project area shown on drawings 2405-L1.1, L2.1, and L3.1. For lighting requirements by street classification, see Table 6, Appendix B.

PARKS AND PUBLIC AREAS

The project has no public areas and this deficiency has contributed to the present blighted condition.

The proposed renewal plan incorporates a public plaza area adjacent to the Bay Village residential section. The public plaza is strategically located at the hub of the project. The location will have the only public transportation connection in the project which serves all residential, institutional and commercial sections. The proposed plaza will be developed as a platform-type area slightly higher than the adjacent street levels. Community and transportation facilities will be incorporated into the plaza area and suitable access to the proposed multi-unit apartment development south of the plaza will be provided.

The existing public schools in the project have inadequate playground facilities. The Lincoln School will be retained with adequate playgrounds and other supporting facilities. The Quincy School is one of the oldest structures in the city school system, and will be replaced by a new elementary school. The present arrangement of this school does not allow for the construction of adequate play areas in accordance with present-day standards. This school will be located between the proposed apartment type dwellings in the south central section of the project and the Chinese residential area, a location where an increase in student population can be expected.

Provisions will be provided for access to the existing MBTA Tremont Street subway. The public plaza will be constructed with access to the subway entrance under the plaza, and an entrance portal at Oak Street Extension. Appropriate cost estimates for this installation have been included in the estimated total cost of the public plaza development. The proposed public areas present no other specific engineering problems. The proposed locations of the public areas are not the deciding factors for the utility revisions immediately adjacent thereto.

WATER SYSTEMS

General. There are three existing water systems in the project. The low service system has the most complete coverage and is supplemented by the high service system in the east central and west sections. The third system, "High Pressure Fire", is located in the east central congested value section of the project only. This section is confined essentially to Broadway, Washington, and Tremont Street areas.

The variable land use in the project does not warrent three complete and separate water systems. We recommend that the Low Service Water System be revised and developed to its maximum potential as the primary system in the project, and that the High Service Water and High Pressure Fire be revised and extended to supplement the Low Service Water in all existing and proposed high population density areas except the west section. For comments and recommendations for the water systems in the west section, see Section entitled, High Service Water.

The most recent study of the water systems was conducted by Charles A. Maguire and Associates. This study entitled, "Preliminary Studies of Existing Utility Systems" (April 1964) was prepared for the Boston Redevelopment Authority. As a part of the study, reports prepared in recent years by the Metropolitan District Commission, National Board of Fire Underwriters, and other interested agencies, were reviewed.

The City of Boston Public Works Department Water Division has jurisdiction over all water systems in the city. The pertinent records and drawings on file with this agency were reviewed. The information assembled from these drawings and records, with other supplementary information from the Charles A. Maguire report, was used to formulate the conclusions and recommendations specified under each of the three water systems.

Low Service Water. The Low Service Water system supplies the largest quantity of water for domestic, commercial, industrial and primary fire protection in the South Cove project. The system is the oldest system in the project. It has been expanded and revised over the years to furnish complete coverage as the area developed. The system has developed into a grid pattern which should assure uniform distribution. However, because of the intermittent construction, there are locations where inadequate size and probable physical condition limit the intended function.

Much of this system was constructed before the adoption of the present standards of the Boston PWD Water Division. These standards specify cement lined, external coated-cast iron pipe and a minimum 8" pipe size. The City standards allow (1) for population increase in areas of low population during initial design; (2) assures more uniform distribution in accordance with the theory of the grid system;

(3) incorporates a realistic peaking factor; and (4) increases the life of the system. The peaking factor is an important item for consideration in the water systems of the metropolitan Boston area, due to the increasing number of air conditioning installations.

Available information indicates that the Low Service Water System is approaching capacity. Distribution is limited by the presence of some small branch mains in the grid pattern. Under the proposed rearrangement of streets, new increased size mains will be installed in new and rebuilt streets. Small branch mains in all sections but the Bay Village area will be eliminated because they occur in streets which will be abandoned. A new perimeter main will be installed in a portion of Stuart Street which will provide improved continuity in the grid pattern. In addition, the system feeder main in Kneeland-Washington Street will be cement-lined to provide increased capacity to the system.

The 60-year old Bay Village piping is suspected to be in poor condition and is now inadequately sized to meet the present City standards. These mains, although primarily installed to supply the residential section, are important to the function and capacity of the grid pattern due to their proximity to the feeder main in Arlington Street. In addition, other proposed utility construction provides an opportune time to replace this piping. All the mains in the Bay Village area will be replaced with new 8" mains which will provide improved capacity to this area of the grid pattern.

For material specifications, see Table 6, Appendix B. Other revisions required to adapt this system, as described, are shown on Drawings 2405-W1.1, W2.1, and W3.1.

High Service Water. Within the renewal area, the existing High Service Water System is primarily located in the east central and western sections. This system is supplied from the M.D.C. High Service feeder network by a 30" and 20" main which continue through the project to the Central Business District. The system was installed between 1909 and 1921 to supplement the Low Service Water system by supplying domestic water and fire protection to high-rise structures. The arrangement of the existing system is poor. There are dead-ends at various locations in the project. This condition limits the capacity of the system.

There is no High Pressure Fire system in the western section of the South Cove project. The High Service and Low Service water systems supply all fire protection in this area. A survey conducted by the National Board of Fire Underwriters in 1950 concluded that there was insufficient water volume available in this section for proper fire protection. To make practical recommendations for the solution of the fire protection problem, policy decisions must be made pertaining to the future method of fire protection throughout the city.

We recommend that a comprehensive city-wide study be made in all congested value areas to determine the fire protection requirements, physical condition, and degree of deficiency of the existing water systems, before any corrective action is performed. There are several solutions to this problem, each of which would involve revisions to one or more of the existing water systems. No revisions are proposed to the High Service System in this section for the above reasons.

We recommend that the High Service Water system in the east central section of the project be expanded into a grid pattern to supply all existing and proposed high rise or high population density structures. With the revisions proposed to the High Service and Low Service water systems, adequate water supply will be available for the proposed land use changes and population increase in the renewal project except the western section. To allow for maximum flexibility and ease of maintenance between and to the two systems, the City of Boston Public Works Department (the governing agency) has a policy of installing division gate valves between the systems. Our recommendations include the installation of such valves at strategic locations. For material specifications, see Table 6, Appendix B. Specific revisions required to develop the system as described are shown on Drawings 2405-5-W1.1, W2.1, and W3.1.

High Pressure Fire System. The existing High Pressure Fire System was installed to provide fire protection for the congested value sections of the city. In the South Cove Project area this system is confined essentially to Broadway, Washington, and Tremont Streets. The system was installed in 1931. Booster pump stations, on Kneeland Street and Atlantic Avenue, supply water to the system from the Low Service Water System. These pump stations have emergency connections to the High Service Water System. The HPFS is designed to operate at 300 pounds per square inch gage. Past tests, as enumerated in the Charles A. Maguire report, indicate that the operating pressure is between 150 and 200 psig. 200 psig operating pressure in a properly sized and arranged piping system is considered adequate for major fires.

The National Board of Fire Underwriters conducted surveys of the HPFS in the early 1950's. A report of these surveys lists weak points in the system. These weak points occur in the Central Business District at the outer limits of the system and could be caused by one or more of the following:

1. Improperly sized and/or arranged piping.
2. Inadequate number of booster pumps at strategic locations in the system.
3. Pipe restriction by corrosion and/or sedimentation.

The location of the South Cove renewal project with relation to the existing booster pumps assures adequate pumping capacity for the project development. However, the independent expansion of the system in the South Cove project could have an adverse effect on the existing system in other locations.

As the city undergoes redevelopment, fire protection becomes more critical and caution should be used in development of the existing fire protection system. All recommendations for revisions and expansion should be compatible with the proposed development in all congested value sections of the city. The recommendations for revisions to the existing HPFS in the South Cove project area are compatible with the proposed renewal in the central and eastern sections of this project. There is no HPFS in the western section of the project.

The system in the project will be expanded,as a grid type, to provide fire protection for all existing and proposed congested value areas in the central and east sections only. New piping in the proposed new Charles Street and Oak Street extensions will be included, to complete the grid pattern. For material specifications, see Table 5, Appendix B. A detail layout of the proposed system revisions is shown on Drawings 2405-5-F1.1 and F2.1.

SURFACE DRAINAGE AND SANITARY SYSTEM

Description of Present System. The existing surface drainage and sanitary flows are in combined systems, except the portion west of Berkeley Street and in Stuart Street from Arlington Street to Clarendon Street. The existing sewer system has three outflows, one in Hudson Street, one at Berkeley Street, and one in Church Street. The Hudson Street outflow continues to the East Side Interceptor, crossing under the J. F. Fitzgerald Expressway and ramps to the Massachusetts Turnpike. The Church Street and Berkeley Street outflows continue to the West Side Interceptor crossing under the Boylston Street subway.

The combined portion of the systems was constructed between the mid 1800's and mid 1920's. Various types of construction common to the period of installation are incorporated in the system. Specific information regarding actual physical condition is limited. To obtain additional information would require a complete comprehensive study including some form of visual inspection.

Information obtained from personnel, drawings, and records of the Boston PWD, Sewer Division, and the Charles A. Maguire and Associates report on Preliminary Utilities Study indicate that the system is providing adequate service and is sufficient for the present land use. One possibility of poor condition exists in the Church Street main sewer between Tremont Street and Stuart Street. In addition, there is a potential surcharging effect in the Church Street sewer and lower

Tremont Street created by the invert and capacity restrictions outside the project area.

Separate System versus Combined Systems

An adequate sewer system is a necessity and an asset to a proposed renewal area. The active and future corrective measures being planned by the M.D.C. and the City of Boston will provide the vital elements of an overall sewerage system. Other renewal projects now contemplated by the BRA, such as the Government Center and Waterfront Projects, will provide separated sewer systems.

The present combined sewerage system in the South Cove Project contributes its share to pollution of the waterfront. The location of the Massachusetts Turnpike and the J. F. Fitzgerald Expressway has isolated the project area from the south section of the city. This alteration and the existing contours results in the South Cove project area becoming the origin of the present systems serving the project. The systems are old in many sections and it is reasonable to assume that there are weak points that could cause severe problems with a capacity increase.

We recommend that for the South Cove Project separate surface drainage and sanitary systems be provided for the following reasons:

(1) To lessen the pollution of the waterfront when systems are separated in adjacent areas.

(2) To continue the program of separation of sewer systems contemplated on present renewal projects.

(3) To avoid any capacity increase to the existing system, if left combined.

(4) To perform the separation of systems while other renewal activities are in progress which creates economical advantages.

(5) That the possibility for extensive changes to the present combined system would be as great under present renewal plans.

Adjacent Area Problems

As previously mentioned, there is a potential surcharging effect on the Church Street sewer resulting from insufficient slope and arrangement of the outflow sewer through the Boston Public Gardens to the West Side Interceptor. The changes to alleviate this problem will be required in sections outside the project area. In a cursory review of this outflow there appears to be three possible problem areas, namely: (1) condition and size of pipe in Hadassah Way; (2) invert elevations resulting from crossing the subway at Boylston Street; and (3) pipe size and slope of a section in the Public Gardens.

The present combined outflow at Hudson Street passes under the J. F. Fitzgerald Expressway, a considerable distance south of the tunnel portal at Kneeland Street, and then is reconnected to the Kneeland Street sewer on the east side of the expressway. Separation of the systems will create a serious location problem for the new

outflow required, most probably the storm drainage outflow. In order to determine exact location and grade of the outflow, it will require a comprehensive detailed study to find the most economical and practical alignment through the maze of highways, railroads, etc., in this area. For any alignment, it appears that the cost will be expensive. We have made no study of such alignment as it is not required for the South Cove project improvements.

Surface Drainage System

Governed by the existing contours within the project, surface drainage will be divided into two systems and will consist of completely new installation. One drainage system will serve the western section with the collector main in Church Street and connected to the existing combined Church Street outflow. The drainage system for the eastern section will be served by a collector main in Harrison Avenue and Harvard Street and connected to the Hudson Street outflow. In addition, a collector main will be provided in Kneeland Street, from Washington Street to Hudson Street, which will serve the south portion of the Central Business District and minor areas within the South Cove Project. This main will connect to the Hudson Street outflow. Suitable branch mains will be installed in new and altered streets to provide the proper local drainage for the various areas.

Sanitary System Modifications

The present existing sewers will be retained as sanitary sewers, where possible, for the following reasons:

(1) The number of house connection alterations will be minimized.

(2) Additional trench depth for new sanitary sewers will be avoided as much as possible.

(3) The existing system can be altered and expanded more readily to accommodate the sanitary revisions required by the project changes.

The sanitary system will be (1) altered and expanded to include all new street arrangements, and (2) to provide additional capacity for the proposed development areas. East of Washington Street, the only major change was a new sewer replacement in Harvard Street because of the age, suspected poor condition, and the new surface drainage sewer installation would seriously disturb the existing sewer. In the center section of the project, new sewers will be provided in the new street arrangements for the areas to be redeveloped. In the Bay Village area, new branch sewers and a collector sewer in Church Street and Piedmont Street will be installed to replace the 100-year-old sewers judged to be in poor condition. In addition, the collector main is required to provide separation of flows and to transmit sanitary flows into the presently separated sewers in Arlington Street. In the western sections, minor changes were made to completely separate the two existing separate systems.

For material specifications for the surface drainage and sanitary system, see Table 5, Appendix B. For details of the new surface drainage system, see Drawings 2405-5-S1.1, S2.1, and S3.1. For details of the sanitary sewer system, see Drawings 2405-1-S4.1, S5.1, and S6.1.

POLICE SIGNAL AND FIRE ALARM SYSTEMS

General. The Police Signal System in the city is under the jurisdiction of the Boston Police Department, Signal Division. The Fire Alarm in the city is under the jurisdiction of the Boston Fire Department, Alarm Division. The existing Fire Alarm and Police Signal systems in the project area are considered adequate and in satisfactory condition by the respective governing agency for the present land use.

Recommendations. Our recommendations include the expansion and rearrangement of the existing systems to coincide with the proposed street adjustments and land use changes in the project.

The New England Telephone and Telegraph Company is required by the City of Boston to install conduits in their main duct banks for installation of Police Signal and Fire Alarm systems in the city. All other materials, conduit, wire, etc., required to complete the systems is furnished, installed, and maintained by the respective governing agency.

The systems recommended have an area coverage for the proposed land use changes in accordance with the applicable standards and regulations. Conduits furnished by the New England Telephone and Telegraph Company will be used wherever practical. The specific changes required to revise the systems as recommended are shown on drawings No. 2405-5-C1.1, C2.1 and C3.1. These drawings have been reviewed by the governing agencies. These agencies have approved the revisions and arrangements proposed.

PRIVATE UTILITIES

General. Virtually all of the present streets in the South Cove Project have one or more types of private utility systems within the right of way. The principal utility systems are:

(1)	Telephone	- New England Tel. & Tel. Co.
(2)	Gas	- Boston Gas Co.
(3)	Electric power	- Boston Edison Co.
(4)	Alarm system	- Boston Low Tension Wire Assoc.

No buried steam lines exist in the street right of ways. All utilities are buried in the streets and no overhead lines exist.

The proposed new street arrangements will result in considerable revision to the private utility systems. In general, the greatest magnitude of changes will be required in the larger areas of development or where street arrangements are totally revised. During the detailed design period for project improvements, sufficient installation, time and provisions for orderly arrangement within the streets must be provided for private utilities.

Telephone. Primary telephone duct banks exist within the South Cove Project in Berkeley, Stuart, Tremont, Washington Streets and Harrison Avenue. Secondary service facilities exist in most streets as duct banks and/or buried conduit.

Only the Tremont Street duct bank appears likely to require major revisions. This will require rerouting between Shawmut Avenue and Broadway in new street alignments. Other revisions will be required to secondary services but will be minor in scope.

Gas. Major gas mains exist in Stuart, Kneeland, Harrison Avenue, Washington, Tremont-Shawmut Avenue, Broadway and Columbus Avenue. Relocation of gas mains from Broadway to other streets will be required. Dependent upon the future arrangement of all utilities within the street cross-section, it may be necessary to make revisions in other major gas mains. Minor changes will be required to provide services to new developments and possibly in streets where extensive rebuilding is performed.

Electric Power. The electric power system consists of cables in buried conduits within the street right of ways. Distribution substations exist on Carver Street and near Stanhope Street. 115 KV primary system cables exist from (1) the Carver Street substation westerly on Stuart Street and (2) southeasterly are Broadway terminating outside the project area. 15 KV cables provide the basic distribution system within the project area with suitable "step-down" transformation provided throughout the area for consumer service.

Relocation of the 115 KV power cable from Broadway will require major revisions and expenditures by the Boston Edison Co. A number of the 15 KV

cables will require rerouting from streets such as Broadway, Carver and Warrenton Streets. Consequently, it appears that the proposed redevelopment within the South Cove will have the most serious impact upon the buried electric power facilities. The sequencing of the electric power installation was previously discussed under the Section entitled "Sequence of Construction."

MBTA POWER FEEDER DUCT BANKS

The Massachusetts Bay Transportation Authority operates and maintains an extensive grid of power supply cables for subway operation. In the central portion of the city the cables are buried in conduit banks within the street right of ways.

Within the South Cove Project, two duct banks exist. One duct bank passes through the project area in Arlington Street and the other exists in Broadway Street and Shawmut Avenue to the portal of the existing Tremont Street subway. At present, the duct bank in Broadway is not in service, and power cables have been removed.

As Broadway will be abandoned for the proposed development, it will be necessary to relocate the duct banks. The proposed new location will be in Shawmut Avenue and Frontage Road. Only the duct bank itself will be installed with suitable facilities for future cable installation. No revisions will be required to the duct bank in Arlington Street.

Cost estimates for the above is included in the project "Site Improvement Estimates" under Code (1) entitled "Demolition and Site Clearance." For specific changes to revise the existing duct banks, see Drawing 2405-5-C1.1 and C2.1.

GEOLOGY

General. A review of the topographical history of the city indicates that the section west of Church Street and east of Harrison Avenue are filled areas. These areas were filled during the 19th century. The boring information recorded in this area indicates the extent of varying fill depths.

Boring information for the project area has been assembled from records of the Boston Society of Civil Engineers and the Massachusetts Turnpike Authority. This information has been recorded on drawing No. 2505-5-B1, B2 and B3. The majority of borings are concentrated in the western section of the project, Kneeland Street and in the Massachusetts Turnpike right of way with the few remaining scattered throughout the project. There is little existing boring information in the areas of proposed extensive development.

The most recent and detailed borings were taken for the Massachusetts Turnpike Authority. The information from these borings was used as a basis for the design of the Turnpike Extension which abuts the southern boundary of the project. The information from these borings is reliable. These borings show the ground water level between elevation 4 ft. and 5 ft., Boston City Base.

A review of the boring information indicates a predominant clay condition of varying depths. There is a little sand and gravel present at specific

locations. One boring at the Cortes Street turnpike ramp shows bedrock at elevation -126'.

Conclusions and Recommendations. Although information concerning subsoil conditions is limited, certain general conclusions can be made and are listed below.

1. The general subsoil conditions are similar to those found in other areas of the city proper. Thus, it appears probable that the design of structures will present no special problems not encountered in the city proper.

2. Information available indicates that ground water will exist near the surface in some areas. Excavations of some depth may require suitable facilities to handle this flow and structures so designed.

3. Information available indicates that bed rock is not sufficiently close to the surface to present excavation problems.

4. In some local areas undesirable foundation material is present and will require consideration during structure designs.

SPECIAL STUDIES

As a part of the project improvement study the following two special studies were made:

1. Special Study - Apartment - Town House - Garage Complex

The renewal plan proposes a complex of apartment type dwellings, town houses and garage within the area bounded by Tremont Street, Corning Street, Shawmut Avenue and the new Oak Street Extension. A preliminary feasibility study was made of this complex comparing three specific criteria. A copy of this study is bound under appendix "C" of this report. As a supplement to this study it should be noted that the proposed type of construction could be expanded across the Massachusetts Turnpike, if desired.

2. Special Study - Proposed Rapid Transit Extension

The MBTA proposes a Rapid Transit Extension through the project. The location of this extension influences the development proposed for certain parcels in the project. A special feasibility study was made comparing the location of the extension proposed by the MBTA to an alternate location proposed by the BRA. A copy of this study is bound under appendix "C" of this report.

APPENDIX A

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	Alley 559	CLASSIFICATION	INTERIOR
FROM	CLARENDON STREET	TO	STANHOPE STREET

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
24	LIVE 1	PARKING 1	WEST

PAVEMENT

LENGTH-FT.	475	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	21'	CONDITION	Poor	MEDIAN	None
AREA-S.Y.	1106	BASE		LAST CONSTR. DATE	

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	None		
LEFT	Concrete	3'	Poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	6"-10"	Poor
LEFT	GRANITE	3"-6"	Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	None			
LEFT	None			
MEDIAN	None			

SEWERS

12" Pipe-Stanhope to Clarendon

WATER

NONE

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	ARLINGTON	CLASSIFICATION	INTERIOR
FROM	BRIDGE over B.&R.R.R.	TO	COLUMBUS AVE.

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
74	LIVE 4 PARKING 2	NORTH - SOUTH

PAVEMENT

LENGTH-FT.	750	SURFACE	Asphalt	CURB	yes
WIDTH-FT.	51 - 54	CONDITION	Good	MEDIAN	none
AREA-S.Y.	4250	BASE	Concrete	LAST CONSTR. DATE	

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	13'	Good
LEFT	CONCRETE	7.5'	Good

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Good
LEFT	GRANITE	5"	Good

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	3	Wood-Top-Mounted-Concrete Single-Arm	10,000	Poor
LEFT	2	Concrete-Single-Arm	20,000	Good
MEDIAN	None			

SEWERS

18"x24"-U-Shape-Bridge to Piedmont
21"x26" Brick-Bridge to Isabella
20"x27" Brick-Isabella to Piedmont
10" Pipe - Melrose to Piedmont
12" Pipe - Melrose to Piedmont

WATER

L. S. - 10" - Stuart to Cortes
L. S. - 48" - Stuart to Cortes

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	ASH	CLASSIFICATION	INTERIOR
FROM	BENNET	TO	OAK

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
41	LIVE 1 PARKING 1	SOUTH

PAVEMENT

LENGTH-FT.	454	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	18'	CONDITION	Fair-Good	MEDIAN	None
AREA-S.Y.	956	BASE	Concrete	LAST CONSTR. DATE	

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE & GRANITE	6'-6"-2'-6"	Poor
LEFT	CONCRETE	6'-6"	Fair-Good

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Fair-Good
LEFT	GRANITE	6"	Good

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	None			
LEFT	1 2	Wood-Top-Mounted Concrete-Single-Arm	10,000 20,000	Poor Good
MEDIAN	None			

SEWERS

12" Pipe - Bennet to Oak

WATER

L. S. - 6" - Bennet to Nassau
L. S. - 8" - Nassau to Oak

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	BROADWAY	CLASSIFICATION	INTERIOR
FROM	STUART STREET	TO	HARRISON AVE.

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
61 - 67	LIVE 4	PARKING 2	NORTHWEST

PAVEMENT

LENGTH-FT.	1689	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	40 - 46	CONDITION	Good	MEDIAN	None
AREA-S.Y.	8188	BASE	Asphalt on Concrete	LAST CONSTR. DATE	1964

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	10'-6"	Good
LEFT	CONCRETE	10'-6"	Good

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Good
LEFT	GRANITE	6"	Good

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	9	Concrete-Single-Arm	20,000	Good
	4	Wood-Top-Mounted	10,000	Poor
LEFT	1	Wood-Top-	10,000	Poor
	5	Concrete-Single-Arm	20,000	Good
MEDIAN	NONE			

SEWERS

12" Pipe - Harrison to Washington
(2)12" Pipe - Washington to Kirkland
20" Barrel - Washington to Tremont
2'9"x3'-0" - Kirkland to Tremont
(2)12" Pipe - Piedmont to Tremont
2'x2'-3" Brick - Fayette to Stuart
(2)12" Pipe - Piedmont to Stuart

WATER

L. S. - 12" - Stuart to Tremont
L. S. - 8" - Tremont to Porter
L. S. - 12" - Kirkland to Washington
L. S. - 6" - Washington to Harrison Ave.

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	BENNETT STREET	CLASSIFICATION	INTERIOR
FROM	WASHINGTON	TO	HARRISON AVE.

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE	PARKING	
45			EAST

PAVEMENT

LENGTH-FT.	434	SURFACE	Asphalt	CURB	yes
WIDTH-FT.	18	CONDITION	Poor	MEDIAN	none
AREA-S.Y.	824	BASE		LAST CONSTR. DATE	1955

SIDEWALKS / CURBS

	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	6'-6"	Fair-Poor	RIGHT	GRANITE	6"	Fair
LEFT	CONCRETE	10'-0"-11'-6"	Fair	LEFT	GRANITE	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Wood-Top-Mounted	10,000	Poor
LEFT	1	Wood-Top-Mounted	10,000	Poor
MEDIAN	None			

SEWERS	WATER
2'-6" x 3'-9" Brick - Washington to Harrison 12" Pipe - Ash to Harrison	L. S. - 12" - Harrison Ave. to Ash L. S. - 6" - Ash to Washington

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	BERKELEY	CLASSIFICATION	INTERIOR
FROM	B. & A. R. R. Bridge	TO	STUART ST

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
80	LIVE 4	PARKING 2	North

PAVEMENT

LENGTH-FT.	525	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	54	CONDITION	Poor	MEDIAN	None
AREA-S.Y.	3150	BASE	Concrete	LAST CONSTR. DATE	1938

SIDEWALKS — CURBS

	SIDEWALKS TYPE	WIDTH	CONDITION		CURBS TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	13'-0"	Good-Fair	RIGHT	GRANITE	3"-8"	Fair
LEFT	CONCRETE & ASPHALT	13'-0"	Good-Fair	LEFT	GRANITE	8"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Concrete-Single-Arm	20,000	Good
	3	Wood-Top-Mounted	10,000	Poor
LEFT	2	Wood-Top-Mounted	10,000	Poor
MEDIAN	NONE			

SEWERS

3' x 3' Brick - Bridge to Stuart
12" Pipe - Bridge to Cortes
15" - Pipe - Cortes to Columbus Ave
18" - Pipe - Columbus Ave. to Stuart
3'-6 x 3'-6 - Concrete - Columbus Ave to Stuart

WATER

L. S. - 12" - Stuart to Bridge
H. S. - 12" - Columbus Ave. to Bridge

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET COMMON
CLASSIFICATION INTERIOR
FROM WASHINGTON
TO TREMONT

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
30.5 - 34.5	LIVE 1 PARKING 1	WEST

PAVEMENT

LENGTH-FT. 470	SURFACE Asphalt	CURB Yes
WIDTH-FT. 20-24	CONDITION Poor	MEDIAN None
AREA-S.Y. 1106	BASE Asphalt	LAST CONSTR. DATE 1949

SIDEWALKS / CURBS

	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE & BRICK	5'-0"	Poor	RIGHT	GRANITE	6"	Poor
LEFT	CONCRETE	5'-5"	Poor	LEFT	GRANITE	6"	Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	2	Wood-Top-Mounted	10,000	poor
LEFT	1	Wood-Top-Mounted	10,000	poor
MEDIAN				

SEWERS	WATER
16" x 24" Egg - Washington to Tremont	L. S. - 8" - Washinton to Tremont

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET CORNING

CLASSIFICATION BOUNDRY

FROM HARRISON AVE.

TO ARLINGTON ST.

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
50.5	LIVE 2 PARKING 2	WEST

PAVEMENT

LENGTH-FT. 1675	SURFACE Asphalt	CURB Yes
WIDTH-FT. 40	CONDITION Good	MEDIAN None
AREA-S.Y. 7812	BASE	LAST CONSTR. DATE 1964

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	2'-0"	Good
LEFT	CONCRETE	8'-6"	Good

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Good
LEFT	GRANITE	6"	Good

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	8	Concrete-Single-Arm	20,000	Good
LEFT	2	Concrete-Single-Arm	20,000	Good
MEDIAN				

SEWERS

12" x 18" Brick - Washington to Tremont
12" Pipe - Washington to Harrison Ave

WATER

L. S. - 10" - Arlington to Fayette
L. S. - 12" - Tremont to Shawmut Ave
L. S. - 6" - Shawmut Ave. to Washington
L. S. - 8" - Washington to Broadway

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	CARVER	CLASSIFICATION	INTERIOR
FROM	STUART	TO	BROADWAY

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
37	LIVE 1 PARKING 2	NORTH

PAVEMENT

LENGTH-FT.	525	SURFACE	Asphalt & Block	CURB	Yes
WIDTH-FT.	22	CONDITION	Fair	MEDIAN	None
AREA-S.Y.	1835	BASE	Block	LAST CONSTR. DATE	1951

SIDEWALKS / CURBS

	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	7'-6"	poor	RIGHT	GRANITE	6"	poor
LEFT	CONCRETE	7'-6"	Fair	LEFT	GRANITE	6"	fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	2	Wood-Top-Mounted	10,000	poor
LEFT	2	Wood-Top-Mounted	10,000	poor
MEDIAN				

SEWERS	WATER
20" Barrel - Broadway to Newbern Pb, 12" x 15" - Brick - Newbern Pl to Stuart	L. S. - 10" - Stuart to Broadway

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	CURVE	CLASSIFICATION	BOUNDRY
FROM	HARRISON AVE.	TO	HUDSON

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE	PARKING	
32	1	1	SOUTH TO WEST

PAVEMENT

LENGTH-FT.	650	SURFACE	Asphalt	CURB	Yesst
WIDTH-FT.	24	CONDITION	under construction	MEDIAN	None
AREA-S.Y.	1730	BASE		LAST CONSTR. DATE	1964

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	8'	Good
LEFT			

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Good
LEFT	GRANITE	6"	Good

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Concrete-Single-Arm	20,000	Good
LEFT	1	Concrete-Single-Arm	20,000	Good
MEDIAN				

SEWERS

24" Pipe - Harrison Ave to Tyler

WATER

L. S. - 12" - Harrison Ave to Hudson
H. S. - 30" - Harrison Ave to Hudson

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	CLARENDON	CLASSIFICATION	BOUNDRY
FROM	NO. side of B. & A. R. R. Bridge	TO	Stuart St.

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
60	LIVE 2 PARKING 2	SOUTH

PAVEMENT

LENGTH-FT.	325	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	36	CONDITION	Fair	MEDIAN	None
AREA-S.Y.	1296	BASE		LAST CONSTR. DATE	1953

SIDEWALKS / CURBS

SIDEWALKS	TYPE	WIDTH	CONDITION	CURBS	TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	12'	Fair	RIGHT	GRANITE	3"-6"	Fair-Poor
LEFT	CONCRETE	12'	Fair	LEFT	GRANITE	3"-6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT	1	Wood-Top-Mounted	10,000	Poor
MEDIAN				

SEWERS	WATER
1'-6" x 1'-6" - Stanhope to Stuart 15" Pipe - Alley #559 to Stuart	H. S. - 12" - Stuart to Stanhope

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	COLUMBUS AVE	CLASSIFICATION	INTERIOR
FROM	STUART ST	TO	No. side of B. & A. R. R. Bridge

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
79	LIVE 4	PARKING 2	NORTH & SOUTH

PAVEMENT

LENGTH-FT.	950	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	54-64	CONDITION	Fair-Poor	MEDIAN	Yes
AREA-S.Y.	8535	BASE	Concrete	LAST CONSTR. DATE	1958

SIDEWALKS / CURBS

	SIDEWALKS				CURBS		
	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	7'-19'	Fair-Poor	RIGHT	GRANITE	6"	Fair-Poor
LEFT	CONCRETE	8'-6'	Fair-Poor	LEFT	GRANITE	6"	Fair-Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	3	Wood-Top-Mounted	10,000	poor
	1	Concrete-Single-Arm	20,000	good
LEFT	3	Wood-Top-Mounted	10,000	poor
	1	Concrete-Single-Arm	20,000	good
MEDIAN	6	Wood-Top-Mounted	10,000	poor

SEWERS	WATER
8" Pipe - Bridge to Berkeley	L. S. - 12" - Stuart To Morgan
12" Pipe - Berkeley to Stuart	H. S. - 16" - Stuart to Berkeley
24" x 36" Brick - at Berkeley Intersection	H. S. - 20" - Berkeley to Bridge

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	CHURCH	CLASSIFICATION	INTERIOR
FROM	TREMONT	TO	STUART

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
40' - 44'	LIVE 2 PARKING 1	NORTH

PAVEMENT

LENGTH-FT. 800	SURFACE Asphalt	CURB Yes
WIDTH-FT. 26 - 30	CONDITION Fair - Poor	MEDIAN None
AREA-S.Y. 2660	BASE Concrete	LAST CONSTR. DATE 1951

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	7'	Fair
LEFT	CONCRETE	7'	Fair

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Fair
LEFT	GRANITE	6"-8"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	2	Wood-Top-Mounted	10,000	Poor
LEFT	2	Wood-Top-Mounted	10,000	Poor
MEDIAN				

SEWERS

4'-0 x 4'-6" Brick & Wood - Tremont to Stuart

WATER

L. S. - 16" - Tremont to Stuart

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET CORTES
CLASSIFICATION INTERIOR
FROM ARLINGTON
TO BERKELEY

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
31'	LIVE 1 PARKING 1	

PAVEMENT

LENGTH-FT. 580	SURFACE Asphalt	CURB Yes
WIDTH-FT. 20	CONDITION Poor	MEDIAN None
AREA-S.Y. 1295	BASE	LAST CONSTR. DATE 1933

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	5.5'	Fair-Poor
LEFT	CONCRETE	5.5'	Good

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Fair
LEFT	GRANITE	6"	Good

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	2	Concrete-Single-Arm	20,000	Good
LEFT	2	Concrete-Single-Arm	20,000	Good
MEDIAN				

SEWERS

16" Brick- Berkeley to Dead End

WATER

L. S. - 10" - Arlington to Berkeley

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	DILLAWAY	CLASSIFICATION	INTERIOR
FROM	HOLLIS	TO	DORE

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
24'	LIVE 1 PARKING 1	SOUTH

PAVEMENT

LENGTH-FT. 250	SURFACE Asphalt	CURB Yes
WIDTH-FT. 15'	CONDITION poor	MEDIAN None
AREA-S.Y. 415	BASE	LAST CONSTR. DATE

SIDEWALKS / CURBS

	SIDEWALKS TYPE	WIDTH	CONDITION		CURBS TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	5'	Poor	RIGHT	GRANITE	6"	Poor
LEFT	CONCRETE	4'	Poor	LEFT	GRANITE	6"	Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Wood-Top-Mounted	10,000	Poor
LEFT				
MEDIAN				

SEWERS	WATER
12" Brick - Hollis to Manhole 10" Pipe - Manhole to Dore	L. S. - 8" - Dore to Hollis

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET DINGLEY PL.
CLASSIFICATION INTERIOR
FROM FAYETTE
TO Private Way

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
	LIVE 1 PARKING 1	North

PAVEMENT

LENGTH-FT. 90	SURFACE Concrete	CURB None
WIDTH-FT. 15-16	CONDITION Poor	MEDIAN None
AREA-S.Y. 155	BASE Block	LAST CONSTR. DATE 1938

SIDEWALKS NONE

	TYPE	WIDTH	CONDITION
RIGHT			
LEFT			

CURBS NONE

	TYPE	HEIGHT	CONDITION
RIGHT			
LEFT			

STREET LIGHTING NONE

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

NONE

WATER

NONE

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET DORE
CLASSIFICATION INTERIOR
FROM WASHINGTON
TO TREMONT

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
23	LIVE 1	PARKING 1	WEST

PAVEMENT

LENGTH-FT. 457	SURFACE Asphalt	CURB Yes
WIDTH-FT. 141	CONDITION Poor	MEDIAN None
AREA-S.Y. 812	BASE Asphalt-Conc.	LAST CONSTR. DATE 1931

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	Asphalt Brick Concrete	4'	Poor
LEFT	CONCRETE	5"	Poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Poor
LEFT	GRANITE	6"	Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Wood-Top-Mounted	10,000	Poor
LEFT				
MEDIAN				

SEWERS

12" Pipe - Washington to Tremont

WATER

L. S. - 8" - Washington to Tremont
H. S. - 8" - Washington to Tremont

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	EDGLEY PL	CLASSIFICATION	INTERIOR
FROM	WINCHESTER	TO	DEAD END

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE	PARKING	

PAVEMENT

LENGTH-FT. 150	SURFACE	CURB
WIDTH-FT. 25	CONDITION	MEDIAN
AREA-S.Y. 400	BASE	LAST CONSTR. DATE

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT			
LEFT	BRICK	7'	poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Fair-Poor
LEFT	GRANITE	6"	Fair-Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

PRIVATE, SEWER

WATER

L. S. - 4" - Winchester to Dead End

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET FAYETTE

CLASSIFICATION INTERIOR

FROM BROADWAY

TO CORNING

RIGHT OF WAY - FT. 34	TRAFFIC LANES - NO. LIVE 1 PARKING 1	TRAFFIC DIRECTION WEST

PAVEMENT

LENGTH-FT. 801	SURFACE Asphalt	CURB Yes
WIDTH-FT. 22	CONDITION Poor	MEDIAN None
AREA-S.Y. 1791	BASE Concrete	LAST CONSTR. DATE 1932

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	BRICK CONCRETE	5.5'	Good
LEFT	BRICK	6.5'	Fair

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Good
LEFT	GRANITE	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT	2	Wood-Top-Mounted	10,000	Poor
MEDIAN				

SEWERS

24" x 28" Barrel - Church to Broadway
18" Pipe - Corning to Church
16" Square Brick-Church to Dingley Place
20" Barrel - Dingley Pl. to Jefferson Pl.

WATER

L. S. - 10" - Broadway to Corning

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	SHAWMUT AVENUE	CLASSIFICATION	INTERIOR
FROM	TREMONT	TO	CORNING

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
	LIVE 2 PARKING 2	ONE WAY

PAVEMENT

LENGTH-FT.	600	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	40	CONDITION	Poor	MEDIAN	None
AREA-S.Y.		BASE	Concrete	LAST CONSTR. DATE	1949

SIDEWALKS / CURBS

	SIDEWALKS TYPE	WIDTH	CONDITION		CURBS TYPE	HEIGHT	CONDITION
RIGHT	Concrete	10'	Fair-Poor	RIGHT	Granite	6"	Poor
LEFT	Concrete	10'	Poor	LEFT	Granite	6"	Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	3	Concrete single arm	20,000	Good
LEFT	2	Concrete single arm	20,000	Good
MEDIAN				

SEWERS	WATER
12" Pipe - Tremont to Broadway 12" x 18" - Corning to Broadway	L.S. 12" - Wheeler to Corning L.S. 8" - Tremont to Wheeler

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	SHAWMUT STREET	**CLASSIFICATION**	INTERIOR
FROM	BROADWAY	**TO**	CHURCH

RIGHT OF WAY - FT.	**TRAFFIC LANES - NO.**	**TRAFFIC DIRECTION**
37 - 40	**LIVE** 1 **PARKING** 2	WEST

PAVEMENT

LENGTH-FT.	265	**SURFACE**	Block	**CURB**	Yes
WIDTH-FT.	23-26	**CONDITION**	Poor	**MEDIAN**	None
AREA-S.Y.	711	**BASE**	Block	**LAST CONSTR. DATE**	1930

SIDEWALKS

	TYPE	**WIDTH**	**CONDITION**
RIGHT	Brick & Concrete	7 ft	Poor
LEFT	Brick & Concrete	7 ft	Poor

CURBS

	TYPE	**HEIGHT**	**CONDITION**
RIGHT	Granite	6"	Poor
LEFT	Granite	6"	Poor

STREET LIGHTING

	FIXTURE-NO.	**TYPE**	**INTENSITY - LUMENS**	**CONDITION**
RIGHT				
LEFT				
MEDIAN				

SEWERS

12" Pipe - Church to Dead End

WATER

L.S. - 6" - Broadway to Church

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	(STUART ST)	CLASSIFICATION	INTERIOR
FROM	GRENVILLE ARLINGTON	TO	CHURCH

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE 1	PARKING 1	one way Arl. to Church

PAVEMENT

LENGTH-FT.		SURFACE	MALADAM	CURB	GRANITE
WIDTH-FT.		CONDITION	FAIR	MEDIAN	NONE
AREA-S.Y.		BASE		LAST CONSTR. DATE	

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE		Fair
LEFT	CONCRETE	7'	Fair

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Fair
LEFT	GRANITE	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Wood		Poor
LEFT				
MEDIAN				

SEWERS

WATER

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	HOLLIS	CLASSIFICATION	INTERIOR
FROM	WASHINGTON	TO	TREMONT

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
31	LIVE 1	PARKING 1	EAST

PAVEMENT

LENGTH-FT.	401	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	18	CONDITION		MEDIAN	None
AREA-S.Y.	579	BASE	Asphalt-Concrete	LAST CONSTR. DATE	1948

SIDEWALKS / CURBS

	SIDEWALKS TYPE	WIDTH	CONDITION		CURBS TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	6.5"	Fair	RIGHT	GRANITE	6"	Fair
LEFT	CONCRETE	6.5'	Fair	LEFT	GRANITE	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Wood-Top-Mounted	10,000	Poor
LEFT	1	Wood-Top-Mounted	10,000	Poor
MEDIAN				

SEWERS

20" Barrel - Tremont to Dead End
20" Barrel - Dillaway to Washington

WATER

L. S. - 16" - Washington to Tremont
H. S. - 12" - Washington to Tremont

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET HUDSON
CLASSIFICATION BOUNDRY
FROM KNEELAND
TO CURVE

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
32	LIVE 1	PARKING 1	SOUTH

PAVEMENT

LENGTH-FT.	850	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	24	CONDITION	under Construction	MEDIAN	None
AREA-S.Y.	2270	BASE	Concrete	LAST CONSTR. DATE	1964

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	8'	Fair-Poor
LEFT			

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Fair
LEFT	GRANITE	6"	Good

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	2	Concrete-Single-Arm	20,000	Good
LEFT	1	Concrete-Single-Arm	20,000	Good
MEDIAN				

SEWERS

3' x 4'-6" BRICK - KNEELAND TO HARVARD
1'-6" x 2'-3" BRICK- HARVARD TO OAK

WATER

H. S. - 30" - KNEELAND TO CURVE
L. S. - 8" - KNEELAND TO CURVE

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	HARRISON AVE.	**CLASSIFICATION**	INTERIOR
FROM	KNEELAND	**TO**	CURVE

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
51	LIVE 2	PARKING 2	SOUTH

PAVEMENT

LENGTH-FT.	1300	**SURFACE**	Asphalt	**CURB**	Yes
WIDTH-FT.	32	**CONDITION**	Fair-Poor	**MEDIAN**	None
AREA-S.Y.	4625	**BASE**	Concrete	**LAST CONSTR. DATE**	1955

SIDEWALKS / CURBS

	SIDEWALKS TYPE	WIDTH	CONDITION		CURBS TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	10.5'	Good-Fair	**RIGHT**	GRANITE	6"	Good-Fair
LEFT	CONCRETE	8.5'	Good-Fair	**LEFT**	GRANITE	6"	Good-Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	6	Concrete-Single-Arm	20,000	Good
LEFT	4	Concrete-Single-Arm	20,000	Good
MEDIAN				

SEWERS

24" Pipe - Curve to Oak
12" Pipe - Oak to Nassau
2'-10" x 4' -3" Brick - Bennet to Harvard
3'-0" Brick - Kneeland to Harvard

WATER

H. S. - 12" - Kneeland to Curve
L. S. - 12" - Kneeland to Harvard

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	HARVARD	CLASSIFICATION	INTERIOR
FROM	WASHINGTON	TO	HUDSON

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
26	LIVE 1 PARKING 1	WEST

PAVEMENT

LENGTH-FT.	775	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	20	CONDITION	Poor	MEDIAN	None
AREA-S.Y.	1703	BASE	Concrete	LAST CONSTR. DATE	1948

SIDEWALKS / CURBS

	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	Concrete & Asphalt	5.5'	fair-poor	RIGHT	GRANITE	6"	poor
LEFT	Concrete & Asphalt	6'	fair-poor	LEFT	GRANITE	6"	fair-poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Wood-Top-Mounted	10,000	poor
LEFT	1	Wood-Top-Mounted	10,000	poor
MEDIAN				

SEWERS

30" x 36" Brick - Subway to Harrison Ave
32" x 42" Brick - Harrison Ave to Tyler
24" Pipe - Harrison Ave to Tlyer
30" Pipe - Tlyer to Hudson

WATER

L. S. - 12" - Washington to Hudson
H. S. - 12" - At Whitmore

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	ISABELLA	**CLASSIFICATION**	INTERIOR
FROM	ARLINGTON	**TO**	COLUMBUS AVE

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
46.5	LIVE 1	PARKING 1	EAST

PAVEMENT

LENGTH-FT.	538	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	20	CONDITION	Fair	MEDIAN	None
AREA-S.Y.	1257	BASE	Asphalt	LAST CONSTR. DATE	1933

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	13'	fair-poor
LEFT	CONCRETE	13.5'	Good-fai

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Good-Fair
LEFT	GRANITE	6"	Good-Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT	3	Concrete-Single-Arm	20,000	Good
MEDIAN				

SEWERS

24" x 36" Brick - Arlington to Columbus Ave.

WATER

L. S. - 10" - Arlington to Columbus Ave.

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET JEFFERSON

CLASSIFICATION INTERIOR

FROM TREMONT

TO FAYETTE

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
19	LIVE 1 PARKING 0	SOUTH

PAVEMENT

LENGTH-FT. 130	SURFACE Asphalt	CURB Yes
WIDTH-FT. 12	CONDITION Good	MEDIAN None
AREA-S.Y. 172	BASE Granite-Block	LAST CONSTR. DATE 1952

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	3.5'	poor
LEFT	CONCRETE	3.5'	poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	fair
LEFT	GRANITE	6"	poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

NONE

WATER

L. S. - 6" - Tremont to Fayette

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET JEFFERSON PL. CLASSIFICATION INTERIOR
FROM BENNET ST TO DEAD END

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE	PARKING	

PAVEMENT

LENGTH-FT.	SURFACE MALADAM	CURB NONE
WIDTH-FT.	CONDITION GOOD	MEDIAN
AREA-S.Y.	BASE	LAST CONSTR. DATE

SIDEWALKS NONE

	TYPE	WIDTH	CONDITION
RIGHT			
LEFT			

CURBS NONE

	TYPE	HEIGHT	CONDITION
RIGHT			
LEFT			

STREET LIGHTING NONE

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

WATER

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET JOHNNY COURT
CLASSIFICATION INTERIOR
FROM MAPLE PL.
TO HARRISON AVE

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
26	LIVE 1 PARKING 1	EAST - WEST

PAVEMENT

LENGTH-FT. 155	SURFACE Asphalt	CURB Yes
WIDTH-FT. 18' 1	CONDITION poor	MEDIAN None
AREA-S.Y. 310	BASE	LAST CONSTR. DATE

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	4'	fair
LEFT	CONCRETE	4.5'	fair

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Fair
LEFT	GRANITE	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT LEFT MEDIAN	1	Concrete-Single-Arm	20,000	good

SEWERS

20" x 24" Brick - Maple Pl to Harrison Ave

WATER

L. S. - 6" - Maple Pl. to Harrison Ave

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	KIRKLAND	**CLASSIFICATION**	INTERIOR
FROM	BROADWAY	**TO**	CORNING

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
19.5'	LIVE 1 PARKING 0	SOUTH

PAVEMENT

LENGTH-FT. 350	**SURFACE** Asphalt-block & Concrete	**CURB** Yes
WIDTH-FT. 12	**CONDITION** poor	**MEDIAN** None
AREA-S.Y. 467	**BASE** Concrete	**LAST CONSTR. DATE** 1952

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	Asphalt & Concrete	4'	Poor
LEFT	Asphalt & Concrete	3.5'	poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	poor
LEFT	GRANITE	6"	poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT LEFT MEDIAN	1	Wood-Top-Mounted	10,000	Poor

SEWERS

12" x 16" Brick - Corning to Manhole
16" x 20" Brick - Manhole to Broadway

WATER

L. S. - 10" - Broadway to Corning

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	KNEELAND	**CLASSIFICATION**	BOUNDRY
FROM	WASHINGTON	**TO**	HUDSON

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE	PARKING	

PAVEMENT

LENGTH-FT. 775	SURFACE Asphalt	CURB yes
WIDTH-FT.	CONDITION good-fair	MEDIAN none
AREA-S.Y.	BASE Concrete	LAST CONSTR. DATE 1959

SIDEWALKS / CURBS

	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	15'	Good-fair	RIGHT	GRANITE	6"-8"	Fair
LEFT	CONCRETE	16'	Good-fair	LEFT	GRANITE	6"-8"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

3'-4" x 2'-4" to 4'-0" x 5'-6"- Washington to S. E. Expressway
15" Pipe - Washington to Whitmore
15" Pipe - Harrison Ave. to Tyler St

WATER

L. S. - 16" - Washington to Hudson

H. S. - 12" - Whitmore to Tyler
H. S. - 16" - Tyler to Hudson

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	KNOX	CLASSIFICATION	INTERIOR
FROM	CHURCH	TO	DEAD END

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
11	LIVE 0 PARKING 1	WEST

PAVEMENT

LENGTH-FT.	130	SURFACE	Cobble	CURB	None
WIDTH-FT.	11	CONDITION	Poor	MEDIAN	None
AREA-S.Y.	172	BASE		LAST CONSTR. DATE	

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT			
LEFT			

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT			
LEFT			

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

9" Pipe - Church to Dead End

WATER

L. S. - 10" - Church to Dead End

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET LYNDEBORO PL.
CLASSIFICATION INTERIOR
FROM CARVER
TO DEAD END

RIGHT OF WAY - FT.	TRAFFIC LANES - NO. LIVE PARKING	TRAFFIC DIRECTION

PAVEMENT

LENGTH-FT.	SURFACE DIRT & BRICK	CURB NONE
WIDTH-FT.	CONDITION FAIR	MEDIAN
AREA-S.Y.	BASE	LAST CONSTR. DATE

SIDEWALKS NONE

	TYPE	WIDTH	CONDITION
RIGHT			
LEFT			

CURBS NONE

	TYPE	HEIGHT	CONDITION
RIGHT			
LEFT			

STREET LIGHTING NONE

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

WATER

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET MAY PL.
CLASSIFICATION INTERIOR
FROM NASSAU
TO OAK

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
	LIVE PARKING	

PAVEMENT

LENGTH-FT.	SURFACE DIRT	CURB
WIDTH-FT.	CONDITION POOR	MEDIAN
AREA-S.Y.	BASE	LAST CONSTR. DATE

SIDEWALKS / CURBS

	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	BRICK&CONCRETE	4	Poor	RIGHT	GRANITE	6"	Poor
LEFT	CONCRETE	4	Poor	LEFT	GRANITE	6"	Poor

STREET LIGHTING NONE

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

WATER

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET MORGAN **CLASSIFICATION** INTERIOR

FROM STANHOPE **TO** COLUMBUS AVE

RIGHT OF WAY - FT.	**TRAFFIC LANES - NO.** **LIVE** 1 **PARKING** 2	**TRAFFIC DIRECTION** NORTH

PAVEMENT

LENGTH-FT. 125	**SURFACE** Asphalt	**CURB** Yes
WIDTH-FT. 26	**CONDITION** Good	**MEDIAN** None
AREA-S.Y.	**BASE**	**LAST CONSTR. DATE**

SIDEWALKS / CURBS

	SIDEWALKS TYPE	WIDTH	CONDITION		CURBS TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	6.5'	Good	**RIGHT**	GRANITE	8"	Good
LEFT	CONCRETE	6.5'	Good	**LEFT**	GRANITE	8"	Good

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS	WATER
NONE	L. S. - 8" - Stanhope to Columbus Ave

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	MAPLE PLACE	**CLASSIFICATION**	INTERIOR
FROM	OAK	**TO**	DEAD END

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
16.5	LIVE 1	PARKING 0	NORTH

PAVEMENT

LENGTH-FT. 100	**SURFACE** Gravel	**CURB** Yes
WIDTH-FT. 10'	**CONDITION** Poor	**MEDIAN** none
AREA-S.Y. 165	**BASE**	**LAST CONSTR. DATE**

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	GRAVEL	3.5	poor
LEFT	BRICK&CONCRETE	3'	poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	3"	poor
LEFT	GRANITE	3"	poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

PRIVATE SEWER

WATER

L. S. - 6" - Oak to Dead End

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	MELROSE	**CLASSIFICATION**	INTERIOR
FROM	BROADWAY	**TO**	ARLINGTON

RIGHT OF WAY - FT.	**TRAFFIC LANES - NO.**		**TRAFFIC DIRECTION**
36	**LIVE** 1	**PARKING** 2	EAST

PAVEMENT

LENGTH-FT. 734	**SURFACE** Asphalt	**CURB** Yes
WIDTH-FT. 23	**CONDITION** Good-Fair	**MEDIAN** None
AREA-S.Y. 1853	**BASE** Asphalt	**LAST CONSTR. DATE** 1952

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE	6.5'	Fair-Poor
LEFT	CONCRETE	6.5'	Fair-Poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	8"-6"	Fair
LEFT	GRANITE	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT **LEFT** **MEDIAN**	3	Wood-Top-Mounted	10,000	poor

SEWERS

2' x 2'-3" Brick - Broadway to Church
12" Scotch Pipe - Arlington to Church

WATER

L. S. - 6" - Broadway to Church
L. S. -10" - Church to Arlington

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	NASSUA	CLASSIFICATION	INTERIOR
FROM	ASH	TO	HARRISON AVE

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
27	LIVE 1 PARKING 1	EAST

PAVEMENT

LENGTH-FT. 277	SURFACE Asphalt	CURB Yes
WIDTH-FT. 20.5	CONDITION Poor	MEDIAN None
AREA-S.Y. 635	BASE Block	LAST CONSTR. DATE 1956

SIDEWALKS / CURBS

	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE	6.5'	fair-poor	RIGHT	GRANITE	6"	fair
LEFT	CONCRETE	7'	fair	LEFT	GRANITE	6"	fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT LEFT MEDIAN	2	concrete-single-arm	20,000	good

SEWERS / WATER

SEWERS	WATER
16" x 24" Egg - Ash to Harrison Ave	L. S. - 6" - Ash to Harrison Ave

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	OAK PLACE	CLASSIFICATION	INTERIOR
FROM	OAK	TO	Dead end

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
	LIVE 0 PARKING 2	

PAVEMENT

LENGTH-FT.	120	SURFACE	Cobble	CURB	Yes
WIDTH-FT.	15'	CONDITION	poor	MEDIAN	None
AREA-S.Y.	200	BASE	-	LAST CONSTR. DATE	-

SIDEWALKS / CURBS

	SIDEWALKS TYPE	WIDTH	CONDITION		CURBS TYPE	HEIGHT	CONDITION
RIGHT	Gravel	4'	Poor	RIGHT	Granite	2"-6"	Poor
LEFT	Brick & Concrete	7.5'	Poor	LEFT	Gr anite	8"	Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	-	-	-	-
LEFT	-	-	-	-
MEDIAN	-	-	-	-

SEWERS	WATER
None	L.S.-6" - Oak to Dead End.

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	OAK	**CLASSIFICATION**	INTERIOR
FROM	Washington	**TO**	Hudson

RIGHT OF WAY - FT.	**TRAFFIC LANES - NO.**	**TRAFFIC DIRECTION**
26 - 32	**LIVE** 1 **PARKING** 1 & 2	East & West

PAVEMENT

LENGTH-FT.	704	**SURFACE**	Asphalt	**CURB**	Yes
WIDTH-FT.	20-26	**CONDITION**	Poor	**MEDIAN**	None
AREA-S.Y.	1792	**BASE**	Concrete	**LAST CONSTR. DATE**	1955

SIDEWALKS

	TYPE	**WIDTH**	**CONDITION**
RIGHT	Concrete	6'	Fair-Poor
LEFT	Concrete	6'	Fair-Poor

CURBS

	TYPE	**HEIGHT**	**CONDITION**
RIGHT	Granite	6"	Fair-Poor
LEFT	Granite	6"	Fair-Poor

STREET LIGHTING

	FIXTURE-NO.	**TYPE**	**INTENSITY - LUMENS**	**CONDITION**
RIGHT	-	-	- -	-
LEFT	2	Wood top mounted	10,000	Poor
MEDIAN	-	-	- -	-

SEWERS

2'-0" x 3'-0" - Tyler to Oak Place
15" Pipe - Tyler to Hudson

WATER

L.S.-12" - Washington to Hudson

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	OSBORN PLACE	CLASSIFICATION	INTERIOR
FROM	BROADWAY	TO	PRIVATE WAY

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE	PARKING	

PAVEMENT

LENGTH-FT.	SURFACE	Concrete	CURB	
WIDTH-FT.	CONDITION	Poor	MEDIAN	
AREA-S.Y.	BASE	Dirt	LAST CONSTR. DATE	

SIDEWALKS / CURBS

SIDEWALKS	TYPE	WIDTH	CONDITION	CURBS	TYPE	HEIGHT	CONDITION
RIGHT	Concrete	4'	Fair	RIGHT	Concrete	6"	Fair
LEFT	Concrete	4'	Fair	LEFT	Concrete	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

WATER

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	PINE	CLASSIFICATION	INTERIOR
FROM	WASHINGTON	TO	HARRISON AVENUE

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
22.5 - 38	LIVE 1	PARKING 0	EAST

PAVEMENT

LENGTH-FT.	420	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	13.5	CONDITION	Poor	MEDIAN	None
AREA-S.Y.	605	BASE	Concrete	LAST CONSTR. DATE	1959

SIDEWALKS / CURBS

	SIDEWALKS TYPE	WIDTH	CONDITION		CURBS TYPE	HEIGHT	CONDITION
RIGHT	Asphalt -concrete Brick	6'-11.5'	Poor	RIGHT	Granite	6"	Poor
LEFT	Asphalt	3'-13'	Poor	LEFT	Granite	6"	Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Wood top mounted	10,000	Poor
LEFT	1	Wood top mounted	10,000	Poor
MEDIAN	-	-	-	-

SEWERS	WATER
16" x 18" Barrel - HARRISON TO DEAD END	L.S. - 6" - WASHINGTON TO HARRISON AVE.

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	PIEDMONT	CLASSIFICATION	INTERIOR
FROM	BROADWAY	TO	ARLINGTON

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
26 - 31	LIVE 1 PARKING 1	EAST

PAVEMENT

LENGTH-FT.	589	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	15 - 20	CONDITION	Fair	MEDIAN	None
AREA-S.Y.	1260	BASE	Brick & Concrete	LAST CONSTR. DATE	1948

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	Concrete	5.5'	Fair-Poor
LEFT	Concrete	5.5'	Fair-Poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	Granite	6"	Fair
LEFT	Granite	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Wood top mounted	10,000	Poor
LEFT	1	Wood top mounted	10,000	Poor
MEDIAN	-	-	-	-

SEWERS

12" Pipe - Broadway to Arlington

WATER

L.S. - 6" - Broadway to Arlington

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET PORTER

CLASSIFICATION INTERIOR

FROM BROADWAY

TO CORNING

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
	LIVE 1 PARKING 1	SOUTH

PAVEMENT

LENGTH-FT.	425	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	13	CONDITION	Poor	MEDIAN	None
AREA-S.Y.	700	BASE	Asphalt	LAST CONSTR. DATE	-

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	Asphalt & Concrete	3.5'	Poor
LEFT	Brick	4'	Poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	Granite	6"	Poor
LEFT	Granite	6"	Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	-	-	- -	-
LEFT	2	Wood top mounted	10,000	Poor
MEDIAN	-	-	- -	-

SEWERS

12" x 19" Brick - CORNING TO MANHOLE
16" x 20" Brick - MANHOLE TO BROADWAY

WATER

L.S. - 6" - BROADWAY TO CORNING

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET SEAVER PLACE

CLASSIFICATION INTERIOR

FROM TREMONT

TO DEAD END

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE	PARKING	

PAVEMENT

LENGTH-FT.	SURFACE Concrete	CURB Left only
WIDTH-FT.	CONDITION Poor	MEDIAN None
AREA-S.Y.	BASE Cobble Stone	LAST CONSTR. DATE

SIDEWALKS / CURBS

	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	None			RIGHT			
LEFT	Concrete	5'	Poor	LEFT	Gran	6"	Poor-Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS / WATER

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	So. CEDAR PLACE	CLASSIFICATION	INTERIOR
FROM	WINCHESTER	TO	DEAD END

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE	PARKING 2	

PAVEMENT

LENGTH-FT.		SURFACE	Cobble Stone	CURB	Concrete
WIDTH-FT.		CONDITION	Poor	MEDIAN	
AREA-S.Y.		BASE		LAST CONSTR. DATE	

SIDEWALKS / CURBS

	SIDEWALKS TYPE	WIDTH	CONDITION		CURBS TYPE	HEIGHT	CONDITION
RIGHT	Concrete	4'	Poor	RIGHT	Gran	6"	Fair
LEFT	Concrete & Brick	4'	Poor	LEFT	Gran	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	0			
LEFT	2	1 - Wood 1 - Single Arm		(Poor (No Top)) (Good)
MEDIAN				

SEWERS

WATER

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET SPEAR PLACE

CLASSIFICATION INTERIOR

FROM BROADWAY

TO PRIVATE WAY

RIGHT OF WAY - FT.	TRAFFIC LANES - NO. LIVE PARKING	TRAFFIC DIRECTION

PAVEMENT

LENGTH-FT.	SURFACE MACADAM	CURB
WIDTH-FT.	CONDITION GOOD	MEDIAN
AREA-S.Y.	BASE	LAST CONSTR. DATE

SIDEWALKS NONE

	TYPE	WIDTH	CONDITION
RIGHT			
LEFT			

CURBS NONE

	TYPE	HEIGHT	CONDITION
RIGHT			
LEFT			

STREET LIGHTING NONE

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS	WATER

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

Sheet 1 of 3

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	STUART	CLASSIFICATION	BOUNDARY
FROM	WASHINGTON	TO	CLARENDON

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
71	LIVE 2	PARKING 2	EAST - WEST

PAVEMENT

LENGTH-FT.	3200	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	40	CONDITION	Good-Fair	MEDIAN	None
AREA-S.Y.	23,324	BASE	Concrete	LAST CONSTR. DATE	1959

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	Concrete	15'	Good-Fair
LEFT	Concrete	16'	Good-Fair

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	Granite	6"-8"	Fair
LEFT	Granite	6"-8"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN	v			

SEWERS

20"Rd-Tremont to Washington
24" x 30" Barrel-Tremont to Washington
20" Pipe - Tremont to Warrenton
15" Pipe - Tremont to 60' East of Warrenton
12" Pipe - Church to Broadway
12" to 10" Pipe - Church to 160' West of Church
16" Barrel-Church to Columbus Ave.

WATER

L.S.-12" - Tremont to Washington (2 lines)
L.S.-12" - North side to Eliot
-12" - South Side to Warrenton only
-12" - Intersection with Warrenton
H.S.-12" - North Side, Tremont-Eliot
L.S.-12" - Arlington to Clarendon
H.S.-12" - Berkeley to Clarendon

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

Sheet 2 of 3

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	STUART	CLASSIFICATION	BOUNDARY
FROM	WASHINGTON	TO	CLARENDON

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE	PARKING	

PAVEMENT

LENGTH-FT.	SURFACE	CURB
WIDTH-FT.	CONDITION	MEDIAN
AREA-S.Y.	BASE	LAST CONSTR. DATE

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT			
LEFT			

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT			
LEFT			

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS	WATER
10" Pipe-Arlington to Clarendon 15" Pipe-Arlington to 1st manhole on Stuart 18" Pipe-Manhole(1st) to 1st Manhole beyond Berkeley Intersection(West) 15" Pipe-1st Manhole beyond Berkeley Intersection(West) to 2nd Manhole West of Intersection 12" Pipe-2nd Manhole West of Intersection to Clarendon	

10" Pipe-Columbus to Clarendon

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

SHEET 3 of 3

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	STUART	CLASSIFICATION	BOUNDARY
FROM	WASHINGTON	TO	CLARENDON

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
	LIVE	PARKING	

PAVEMENT

LENGTH-FT.	SURFACE	CURB
WIDTH-FT.	CONDITION	MEDIAN
AREA-S.Y.	BASE	LAST CONSTR. DATE

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT			
LEFT			

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT			
LEFT			

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT				
LEFT				
MEDIAN				

SEWERS

From Columbus Ave 12" Pipe & 15" Pipe to Berkeley Intersection
From Berkeley Intersection 22" Pipe, 20" Pipe & 18" Pipe to Clarendon St.

WATER

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	TYLER	CLASSIFICATION	INTERIOR
FROM	KNEELAND	TO	CURVE

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
33	LIVE 1	PARKING 2	NORTH

PAVEMENT

LENGTH-FT.	1200	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	24	CONDITION	Fair	MEDIAN	None
AREA-S.Y.	3200	BASE	Asphalt	LAST CONSTR. DATE	1959

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	Concrete	8.5'	Fair
LEFT	Concrete	8.5'	Fair

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	Granite	6"	Fair
LEFT	Granite	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	5	Concrete single arm	20,000	Good
LEFT	4	Concrete single arm	20,000	Good
MEDIAN				

SEWERS

2'-0" x 3'-0" Brick-Harvard to Kneeland
2'-0" x 3'-0" Brick-Curve to Harvard

WATER

L.S. - 12" - Kneeland to Oak
L.S. - 6" - Oak to Curve

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	WHEELER	CLASSIFICATION	INTERIOR
FROM	SHAWMUT AVENUE	TO	CORNING

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
20.5	LIVE 1 PARKING 0	SOUTH

PAVEMENT

LENGTH-FT.	250	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	13	CONDITION	Poor	MEDIAN	None
AREA-S.Y.	336	BASE	Concrete	LAST CONSTR. DATE	1952

SIDEWALKS / CURBS

	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	Asphalt & Concrete	4'	Good-Poor	RIGHT	Granite	6"	Good=Poor
LEFT	Asphalt Concrete	3.5'	Good-Poor	LEFT	Granite	6"	Good-Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	-	-	- -	-
LEFT	1	Wood top mounted	10,000	Poor
MEDIAN				

SEWERS	WATER
16"x12" Brick - Shawmut to Corning	L.S. - 6" - Shawmut Ave to Corning

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	WHITMORE	CLASSIFICATION	INTERIOR
FROM	KNEELAND	TO	HARVARD

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
24 - 29	LIVE 1 PARKING 0	

PAVEMENT

LENGTH-FT.	250	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	15 - 20	CONDITION	Fair-Poor	MEDIAN	None
AREA-S.Y.	500	BASE	Concrete	LAST CONSTR. DATE	-

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	Concrete	5	Poor
LEFT	Concrete	4'	Fair

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	Granite	6"	Poor
LEFT	Granite	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT LEFT MEDIAN	1	Concrete single arm	20,000	Good

SEWERS

None

WATER

L.S. - 4" - Kneeland to Harvard
L.S. - 6" - " to "
H.S. -10" - " to "

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	STANHOPE	CLASSIFICATION	INTERIOR
FROM	BERKELEY	TO	CLARENDON

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
30 - 66	LIVE 1 PARKING 1	EAST - WEST

PAVEMENT

LENGTH-FT.	608	SURFACE	ASPHALT	CURB	YES
WIDTH-FT.	20 - 56	CONDITION	FAIR	MEDIAN	NONE
AREA-S.Y.	1692	BASE	CONCRETE	LAST CONSTR. DATE	1953

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	Concrete & Asphalt	5'	Fair-Poor
LEFT	Concrete	5'	Fair-Poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	Granite	3"-6"	POOR
LEFT	Granite	3"-6"	POOR

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	1	Wood Top Mounted	10,000	POOR
LEFT	1	Wood Top Mounted	10,000	POOR
MEDIAN				

SEWERS

1'-6"x3'-0 Concrete-Clarendon to Berkeley
1'-6"x1'-8" Concrete-Clarendon to Morgan
2'-0"x2'-3" Concrete-Morgan to Berkeley

WATER

L.S. - 10" - Berkeley to Morgan
H.S. - 12" - Morgan to Clarendon

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	WARRENTON	CLASSIFICATION	INTERIOR
FROM	WASHINGTON	TO	STUART

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.		TRAFFIC DIRECTION
33 - 39	LIVE 1	PARKING 1	EAST

PAVEMENT

LENGTH-FT.	573	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	19 - 25	CONDITION	Poor	MEDIAN	None
AREA-S.Y.	1455	BASE	Block & Concrete	LAST CONSTR. DATE	1949

SIDEWALKS / CURBS

	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	Concrete Brick	6', 7' & 8'	Fair	RIGHT	Granite	6"	Fair - Poor
LEFT	Concrete Brick	6', 7' & 8'	Fair	LEFT	Granite	6"	Fair - Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	3	Wood Top Mounted	10,000	Poor
LEFT	2	Wood Top Mounted	10,000	Poor
MEDIAN	-	-	-	-

SEWERS	WATER
24" Barrel-Stuart to Manhole (2) 12" Pipe - Broadway to 150' North of Broadway	L.S. - 8" - Washington to Tremont L.S. -12" - Tremont to Stuart H.S. -12" - Tremont to Stuart

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	WINCHESTER	CLASSIFICATION	INTERIOR
FROM	CHURCH	TO	ARLINGTON

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
36	LIVE 1 PARKING 2	WEST

PAVEMENT

LENGTH-FT.	640	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	23	CONDITION	Fair	MEDIAN	None
AREA-S.Y.	1704	BASE	Concrete	LAST CONSTR. DATE	1948

SIDEWALKS / CURBS

	SIDEWALKS TYPE	WIDTH	CONDITION		CURBS TYPE	HEIGHT	CONDITION
RIGHT	Concrete & Brick	6.5'	Fair	RIGHT	Granite	6"	Fair
LEFT	Concrete	6.5'	Fair	LEFT	Granite	6"	Fair

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	-	-	- -	-
LEFT	1 2	Concrete single arm Wood top mounted	20,000 10,000	Good Poor
MEDIAN	-	-	- -	-

SEWERS

9" Scotch Pipe-Arlington to Edgerley Pl.
12" Pipe - Edgerley Pl. to Church
12" Scotch Pipe - Church to near Broadway

WATER

L.S. - 6" - Church to Arlington

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	WASHINGTON	CLASSIFICATION	INTERIOR
FROM	STUART	TO	CORNING

RIGHT OF WAY - FT.	TRAFFIC LANES - NO. LIVE	TRAFFIC LANES - NO. PARKING	TRAFFIC DIRECTION
41	2	2	NORTH

PAVEMENT

LENGTH-FT.	1300	SURFACE	Asphalt	CURB	Yes
WIDTH-FT.	33	CONDITION	Fair	MEDIAN	None
AREA-S.Y.	4763	BASE		LAST CONSTR. DATE	

SIDEWALKS

	TYPE	WIDTH	CONDITION
RIGHT	CONCRETE&GRANITE	8.5'	Fair-Poor
LEFT	CONCRETE&GRANITE	8.5' 10.5'	Fair-Poor

CURBS

	TYPE	HEIGHT	CONDITION
RIGHT	GRANITE	6"	Fair-Poor
LEFT	GRANITE	6"	Fair-Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	13 1	Wood-Top-Mounted-Concrete Single-Arm	10,000 20,000	Poor Good
LEFT	13 1	Wood-Top-Mounted-Concrete Single-Arm	10,000 20,000	Poor Good
MEDIAN				

SEWERS

2' x 4" x 3' - 6" Brick-Stuart to Bennet
20" Barrel-Hollis to Common
12" Pipe-Common to Warrenton
20" Barrel-Warrenton to Corning

WATER

L. S. - 16" - Stuart to Corning
H. S. - 12" - Dore to Corning

REMARKS

BOSTON REDEVELOPMENT AUTHORITY
SOUTH COVE PROJECT, R-92

STREET CONDITION SURVEY

CHAS. T. MAIN, INC., BOSTON, MASS.
JANUARY, 1965

STREET	TREMONT	**CLASSIFICATION**	INTERIOR
FROM	STUART	**TO**	EAST side of B & A. R. R. Bridge

RIGHT OF WAY - FT.	TRAFFIC LANES - NO.	TRAFFIC DIRECTION
81 - 102	LIVE 4 PARKING 2	EAST - WEST

PAVEMENT

LENGTH-FT.	1500	**SURFACE**	Asphalt	**CURB**	Yes
WIDTH-FT.	54.75	**CONDITION**	Good-Poor	**MEDIAN**	None
AREA-S.Y.	10,000	**BASE**	Concrete	**LAST CONSTR. DATE**	1957

	SIDEWALKS				CURBS		
	TYPE	WIDTH	CONDITION		TYPE	HEIGHT	CONDITION
RIGHT	CONCRETE&ASPHALT	14	Good-Fair	RIGHT	GRANITE	6"	Fair
LEFT	CONCRETE	13	Fair-Poor	LEFT	GRANITE	6"	Poor

STREET LIGHTING

	FIXTURE-NO.	TYPE	INTENSITY - LUMENS	CONDITION
RIGHT	4	Concrete-Single-Arm	20,000	Good
LEFT	3	Wood-Top-Mounted	10,000	Poor
	4	Concrete-Single-Arm	20,000	Good
MEDIAN	2	Wood-Top-Mounted	10,000	Poor

SEWERS	WATER
15" Pipe - Common to Stuart 10" Pipe - Common to Stuart 12" Pipe - Common to Stuart 24" x 27" Barrel - Shawmut to Broadway 12" Pipe - Broadway to Corning 16" x 20" Brick-Broadway to Corning 1'-6" x 3-9" - Broadway to Church 3'-6" x 3'-6" - Broadway to Church	L. S. - 12" - Stuart to Broadway L. S. - 10" - Broadway to Corning

REMARKS

APPENDIX B

TABLE NO. 1

ALPHABETICAL LISTING OF EXISTING STREETS

South Cove Project Area

Mass. R-92

NAME	LOCATION	PHOTOGRAMMERIC SHEET NUMBER	STREET CLASSIFICATION
Alley 559	Clarendon to Stanhope	23N-11E	Interior
Arlington	Stuart to Cortes	23N-12E, 24N-12E	Interior
Ash	Oak to Bennett	23N-12E	Interior
Bates Place	Off Kneeland	24N-12E	Interior
Bay	Off Fayette	23N-12E	Interior
Bennett	Washington to Harrison	23N-12E, 24N-12E	Interior
Berkeley	Stuart to Cortes	23N-11E	Interior
Broadway	Stuart to Harrison Ave.	24N-12E, 23N-12E	Interior
Carver	Stuart to Broadway	24N-12E	Interior
Church	Stuart to Tremont	24N-12E, 23N-12E	Interior
Clarendon	Stuart to Stanhope	23N-11E	Boundary
Columbus Ave.	Stuart to Morgan	23N-11E, 24N-12E	Interior
Common	Tremont to Washington	24N-12E, 23N-12E	Interior
Corning	Tremont to Harrison Ave.	23N-12E	Interior
Cortes	Tremont to Berkeley	23N-11E, 24N-12E	Interior
Curve	Harrison Ave to Hudson	23N-12E	Interior
Dillaway	Dore to Hollis	24N-12E	Interior
Dingley Place	Off Fayette	23N-12E	Interior
Dore	Tremont to Washington	24N-12E	Interior

NAME	LOCATION	PHOTOGRAMMERIC SHEET NUMBER	STREET CLASSIFICATION
Edgerly Place	Off Washington		Interior
Greenville Place	Stuart to Church	24N-12E	Interior
Fayette	Broadway to Cortes	23N-12E	Interior
Harrison Ave.	Kneeland to Broadway	24N-12E, 23N-12E	Interior
Harvard	Washington to Hudson	24N-12E, 23N-12E	Interior
Holland Place	Off Tyler	24N-12E	Interior
Hollis	Tremont to Washington	24N-12E	Interior
Hudson	Kneeland to Curve	24N-12E, 23N-12E	Interior
Isabella	Columbus to Arlington	23N-11E, 23N-12E	Interior
Jefferson	Tremont to Fayette	23N-12E	Interior
Jefferson Place	Off Bennett	23N-12E	Interior
Johnny Court	Harrison to Maple Pl.	23N-12E	Interior
Kirkland	Corning to Broadway	23N-12E	Interior
Kneeland	Washington to Hudson	24N-12E	Boundary
Knox	Off Church	23N-12E	Interior
Lyndeboro Place	Off Broadway	24N-12E	Interior
Maple Place	Oak to Johnny Court	23N-12E	Interior
May Place	Oak to Nassau	23N-12E	Interior
Melrose	Arlington to Broadway	23N-12E, 24N-12E	Interior
Morgan	Stanhope to Columbus Ave.	23N-11E	Interior
Nassau	Ash to Harrison Ave.	23N-12E	Interior
New Bern Place	Off Carver	24N-12E	Interior
Oak	Washington to Hudson	23N-12E	Interior
Oak Place	Off Oak	23N-12E	Interior

NAME	LOCATION	PHOTOGRAMMERIC SHEET NUMBER	STREET CLASSIFICATION
Osborn Place	Off Broadway	23N-12E	Interior
Piedmont	Arlington to Broadway	24N-12E	Interior
Pine	Washington to Harrison	23N-12E	Interior
Porter	Corning to Broadway	23N-12E	Interior
Seaver Place	Off Tremont	24N-12E	Interior
Shawmut Ave.	Tremont to Corning	23N-12E, 24N-12E	Interior
Shawmut	Church to Broadway	24N-12E	Interior
So. Cedar Place	Off Winchester	24N-12E	Interior
Spear Place	Off Broadway	23N-12E	Interior
Stanhope	Clarendon to Berkeley	23N-11E	Interior
Stuart	Clarendon to Washington	23N-11E, 24N-12E	Boundary
Tremont	Stuart to Cortes	23N-12E, 24N-12E	Interior
Tyler	Kneeland to Curve	23N-13E, 24N-12E	Interior
Warrenton	Stuart to Washington	23N-12E, 24N-12E	Interior
Washington	Stuart to Corning	23N-12E, 24N-12E	Interior
Wheeler	Corning to Shawmut	23N-12E	Interior
Whitmore	Kneeland to Harvard	24N-12E	Interior
Winchester	Arlington to Broadway	23N-12E, 24N-12E	Interior
Wyman Place	Off Common	23N-12E	Interior

TABLE NO. 2

STREETS TO BE ABANDONED

STREET	FROM	TO
Broadway	Stuart	Piedmont
	Melrose	Harrison Avenue
Carver	Stuart	Broadway
Common	Tremont	Washington
Dillaway	Dore	Hollis
Dore	Tremont	Washington
Hollis	Tremont	Washington
Hudson	Oak	Frontage Road
Kirkland	Broadway	Frontage Road
Pine	Washington	Harrison Avenue
Porter	Broadway	Frontage Road
Shawmut	Broadway	100 Ft. West of Broadway
Tremont	Shawmut Avenue	50 Ft. South of Broadway
Tyler	Oak	Frontage Road
Warrenton	Washington	100 Ft. North of Tremont
Wheeler	Shawmut Avenue	Frontage Road

STREETS TO BE RETAINED AS PRIVATE WAYS

STREET	FROM	TO
Ash	Bennett	Oak
Bennett	Washington	Harrison Avenue
May Place	Oak	Harrison Avenue
Nassau	Ash	Harrison Avenue

TABLE NO. 3

SUMMARY OF CONDITION OF NEW AND RETAINED STREETS

Listed below is a tabulation of the city streets in the project area (new and to be retained). Recommended improvements and/or existing conditions are shown herein. Private ways are not listed in the tabulation below.

Street conditions were determined by a survey in January , 1965. This tabulation entitled STREET CONDITION SURVEY, SOUTH COVE PROJECT, BOSTON, MASS., is enclosed in APPENDIX B.

SUMMARY OF STREETS

NEW

STREET	Roadway	Curb	Sidewalk
Charles St. Extension (Stuart to Oak St. Extension)	New	New	New
Frontage Road (Mass. Turnpike to 150 Ft. West of Turnpike)	New	New	New
Frontage Road (Berkeley to Columbus Ave.)	New	New	New
Oak Street Extension (Washington to Charles St. Ext)	New	New	New
Warrenton Place (Tremont to Warrenton)	New	New	New

GOOD

STREET	Roadway	Curb	Sidewalk
Arlington (Stuart to Frontage Road)	Resurface	Reset	Good
Broadway (Piedmont to Melrose)	Good	Good	Good
(Melrose to Charles St. Ext.)	New	New	New
Frontage Road (Berkeley to Arlington)	Rebuild	Rebuild	Rebuild
(Arlington to Washington)	Rebuild (Part)	Rebuild (Part)	Rebuild (Part)
(Washington to Harrison Ave.)	Rebuild	Rebuild	Rebuild

GOOD

STREET	Roadway	Curb	Sidewalk
Frontage Road (Harrison Ave. to 150 Ft. West of Mass. Turnpike)	Resurface	Reset (Part)	Good
Hudson (Kneeland to Oak)	Good	Good	Fair
Jefferson (Fayette to Tremont)	Good	Fair	Fair
Kneeland (Washington to 120' East)	Rebuild	Rebuild	Rebuild
(Hudson to 120' East of Washington)	Resurface	Reset	Good
Morgan (Stanhope to Columbus Ave)	Good	Good	Good
Stuart (Clarendon to Berkeley)	Good	Fair	Good

FAIR

STREET	Roadway	Curb	Sidewalk
Clarendon (Stuart to Mass. Turnpike)	Fair	Fair	Fair
Isabella (Arlington to Columbus Ave.)	Fair	Good	Good
Melrose (Arlington to Broadway)	Rebuild	Rebuild	Rebuild
Piedmont (Arlington to Broadway)	Rebuild	Rebuild	Rebuild
Stanhope (Berkeley to Clarendon)	Fair	Fair	Fair
Stuart (Berkeley to Warrenton)	Resurface	Reset	Good
(Warrenton to Washington)	Rebuild	Rebuild	Rebuild
Tremont (Stuart to 150 Ft. South of Warrenton Place)	Resurface	Reset	Good
(150 Ft. South of Warrenton Place to Oak St)	Rebuild	Rebuild	Rebuild
Tyler (Stuart to Oak)	Fair	Fair	Fair
Washington (Stuart to Frontage Road)	Rebuild	Rebuild	Rebuild
Winchester (Arlington to Broadway)	Rebuild	Rebuild	Rebuild

POOR

STREET	Roadway	Curb	Sidewalk
Berkeley (Stuart to Frontage Road)	Resurface	Reset	Good
Church (Stuart to Tremont)	Rebuild	Rebuild	Rebuild
Columbus Ave. (Frontage Rd. to Stuart)	Resurface	Reset	Repair
Fayette (Church to Dead Ends)	Rebuild	Rebuild	Rebuild
Harrison Ave. (Kneeland to Frontage Rd)	Resurface	Reset	Good
Harvard (Washington to Harrison Ave)	Resurface	Reset	Repair
(Harrison Ave to Hudson)	Rebuild	Rebuild	Rebuild
Johnny Court (Harrison Ave to Maple Pl.)	Resurface	Reset	Fair
Maple Place (Oak to Johnny Court)	Rebuild	Rebuild	Rebuild
Oak (Hudson to Washington)	Resurface	Reset	Repair
Shawmut Ave. (Oak St. Extension to Frontage Road)	Rebuild	Rebuild	Rebuild
Shawmut (Church to Dead End)	Resurface	Reset	Repair
Tremont (Oak St. Extension to Frontage Road)	Rebuild	Rebuild	Rebuild
Warrenton (Stuart to 180 Ft. South of Warrenton Place)	Resurface	Reset	Fair
Whitmore (Kneeland to Harvard)	Resurface	Reset	Repair

TABLE NO. 4

TYPICAL STREET CONSTRUCTION & ALTERATIONS

MAJOR STREET (NEW) OR (REBUILD)

12" Foundation Course

6" Base Course

2$\frac{1}{2}$" Bituminous Concrete (Pavement)

MINOR STREET (NEW) OR (REBUILD)

10" Foundation Course

4" Base Course

2$\frac{1}{2}$" Bituminous Concrete (Pavement)

SIDEWALK (NEW)

1. Granite Curb (Type VA-4)
2. 8" Gravel Base Course
3. Wire Mesh
4. 4" Concrete (2-Course)

SIDEWALK (REBUILD)

4" Gravel Base

Wire Mesh

4" Concrete (2-Course)

RESURFACE ON EXISTING SURFACE

Tack Coat

Bituminous Concrete Type I-1-1$\frac{1}{2}$"

TABLE NO. 5

WATER & SEWER SYSTEMS - MATERIAL SPECIFICATION

High & Low Service Water Systems

Pipe. Tar coated, cement lined, cast iron pipe Federal Specifications WW-P-421 Class 250, Type 2. (Normal laying length-16 Ft.). Cement shall conform to ASA Specification A21-4-52.

Fittings. Tar coated, cement lined, cast iron fittings AWWA Specification C100-08 for cast iron pressure fittings, Class "D".

Gate Valves. Parallel double disc, bell ends, non-rising stem. New York pattern, Metropolitan type, conforming to AWWA Specification C500-61.

High Pressure Fire System

Pipe. Cast iron pipe conforming to AWWA standard specifications for Class "H" pipe.

Sanitary Drainage System

Pipe. Vitrified clay, extra strength ASTM Specifications C200-44T.

Fittings. Same as pipe.

Surface Drainage System

Pipe. Reinforced concrete, conforming to Federal Specifications SS-P-381.

TABLE NO. 6

LIGHTING REQUIREMENTS BY STREET CLASSIFICATION

CLASS	DESCRIPTION	LUMENS PER LIN.FT.	MERCURY VAPOR LUMENS
	MAJOR STREETS		
A.	Very heavy vehicular and/or pedestrian traffic, bus routes, four or more traffic lanes	250-300	20,000
B.	Moderate to heavy vehicular and/or pedestrian traffic, bus routes	40-90	11,000
	MINOR STREETS		
A.	Residential streets, average business districts, public buildings used at night, heavy tree foliage, moderate to heavy vehicular and/or pedestrian traffic, bus routes continuous apartment type dwellings	30-60	7,000
B.	Residential streets, private ways, alleys, strictly residential in use, all residential streets not included in Class A	12.5-26	3,500

APPENDIX C

SPECIAL STUDY - APARTMENT-TOWN HOUSE-GARAGE COMPLEX

Description and Location of Complex Study

As a part of the South Cove Project renewal plan, it is contemplated that residential structures will be constructed within an area bounded by Tremont Street, Corning Street, Shawmut Avenue, and a new street on the north. (See attached drawings.) Consideration is being given to developing this area in a complex composed of an underground garage, apartment buildings, and town house type structures.

Listed below are the three proposed alternatives which are proposed.

CASE I - Construction of Apartment Structures (8-10 floors) and Town House Structures (3-4 floors), located as shown on the attached plan. Structures to be located at ground level with full and level basements.

CASE II - Construction of an underground two (2) floor garage combined with Apartment structures (8-10 floors) and Town House structures (3-4 floors) as shown on the attached plan. The garage roof or platform level to be considered level at approximately elevation 28, suitable for pedestrian or plaza use. Substructures of the residential structures to be suitable for combined garage and structure loadings.

CASE III - Similar to Case II above, except that all structures to be three levels or floors below the platform level.

Objective

Using the limited information available, prepare for comparison, substructure preliminary cost estimates for the case studies described in the previous section, and to determine the engineering feasibility of the alternative proposals.

Cost Estimate Studies

Information on which Cost Estimate Studies are based is quite limited. Boring data available from the nearby Massachusetts Turnpike was used and conditions assumed to be relatively similar. Building sizes were assumed by scaling from the renewal plan. Substructure sections were considered which are within the normal scope of shape and support spacing for similar buildings.

There are several major factors which affect the costs of the three studies. In Case I, foundation conditions will probably result in the use of foundation piling for both apartment and town house structures. One level basements should be above the ground water level. In Case II, the same foundation conditions will apply to all structures. Additional load requirements resulting from combined building and garage loads will require a larger structure cross-section and additional foundation supports. Raising the entire structure above ground level to the platform level will result in decreased excavation costs and should leave the lowest floor just above ground water level.

In Case III, additional costs will be incurred over Case II, due to the lower floor being (1) beneath ground water level, (2) additional shoring required and (3) increased excavation difficulties.

The estimated costs of the three studies are listed below. Reinforced concrete structures were assumed for the study for all structures, and costs were estimated on the basis of one construction operation. It should be noted that the costs shown are for the substructure only, without the inclusion of building services and are only sufficiently detailed to use for comparison and range of magnitude of total costs.

SUBSTRUCTURE ONLY (w/o Building Services)

Apartments	CASE I	CASE II	CASE III
Apartments	$305,000	$ 390,000	$ 590,000
Town Houses	465,000	585,000	1,000,000
Garage	-	870,000	1,565,000
Total	$770,000	$1,845,000	$3,155,000
Floor Area, square feet	43,000	174,000	261,000
Unit Comparison, Substructure Only	$17.90 per sq ft	$10.60 per sq ft	$12.10 per sq ft

Conclusions

1. It is feasible to construct each of the three studies. Any major problems should result from foundation conditions and from the ground water elevation which may be encountered, especially in Case III.

2. From the magnitude and range of costs obtained, it appears that either of the alternate studies may be economical to construct, dependent upon use allocation.

3. In comparing Case II with Case III, the unit costs for garage space will definitely be higher for Case III but considerably more space is available.

4. To determine which Case study would be the most desirable and suitable to construct depends on a more definitive study using (1) additional boring information, (2) detailed design and layout studies, and (3) economic use studies.

SOUTH COVE PROJECT
STUDY OF COMBINED GARAGE-APARTMENT-COMPLEX

COST STUDY - APARTMENT STRUCTURE (SUBSTRUCTURE ONLY)

Assumed Building Size - 70 feet by 70 feet
Assumed Building Height - Eight (8) to Ten (10) Floors

Description	CASE I	CASE II	CASE III
Excavation and Foundations	$ 28,000	$ 31,000	$ 49,000
Floors, Walls and Columns	64,000	95,000	144,000
Backfill and Waterproof	10,000	4,000	4,000
Total	$102,000	$130,000	$197,000
Total Cost			
Apartments (3 ea.)	$306,000	$390,000	$591,000
USE	$305,000	$390,000	$590,000

COST STUDY - TOWN HOUSE STRUCTURE (SUBSTRUCTURE ONLY)

Assumed Building Size - 200 feet by 50 feet
Assumed Building Height - Three (3) to Four (4) Floors

Description	CASE I	CASE II	CASE III
Excavation and Foundations	$ 34,000	$ 40,000	$ 84,000
Floors, Walls and Columns	113,000	159,000	262,000
Backfill and Waterproof	16,000	7,000	7,000
Total	$163,000	$206,000	$353,000
Total Cost			
Town Houses (28,300 sq ft)	$462,000	$583,000	$999,000
USE	$465,000	$585,000	$1,000,000

COST STUDY - GARAGE STRUCTURE

Area of Garage Structure - 87,000 sq ft

Area Occupied by Apartments - 14,700 sq ft

Area Occupied by Town Houses - 28,300 sq ft

CASE I - No Garage Required

CASE II - Two-floor Garage (Area under Buildings omitted)

Garage Estimated Unit Price		$10.00/sq ft floor area
10% Reduction-for Building Services		1.00/sq ft floor area
Base Unit Price - Substructure		$ 9.00/sq ft floor area
Base Cost of Garage Substructure - 88,000 sq ft @ $9.00		$792,000
Additional Costs due to Foundation	L.S.	75,000
Total		$867,000
USE		$870,000

CASE III - Three Floor Garage (Area under Buildings omitted)

Base Cost of Garage Substructure 132,000 sq ft @ $9.00	$1,338,000
Additional Costs - Foundation Supports Lump Sum	75,000
Additional Cost for (1) Depth of Excavation, (a) Dewatering and (3) Shoring Increase Lump Sum	150,000
Total	$1,563,000
USE	$1,565,000

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BOSTON, MASSACHUSETTS 02110

June 18, 1965

2405-5

SUBJECT: Special Study -
Proposed Rapid Transit Extention

Boston Redevelopment Authority
20 Pemberton Square
Boston, Massachusetts

Attention Mr. Wallace B. Orpin, Chief Engineer

Gentlemen:

On February 2, 1965, in connection with the special studies for the proposed rapid transit extension alternate alignments in the South Cove Project, your Mr. Hazen requested that we advise him how Alignment "A" affects the Tremont-Arlington St. bridge.

Essentially, the alignment of both Alignment "A" (desired BRA alignment) and Alignment "B" (proposed MBTA alignment) are the same at the Tremont-Arlington St. Bridge. The major difference is that Alignment "B" is approximately at present grade and Alignment "A" is approximately twenty feet below grade.

As can be seen in Sketch SK-1, the typical subway cross-section seriously interferes with the pier foundations. This will require removal and reconstruction of a major section of the Tremont-Arlington St. bridge. After removal, the bridge structure can then be rebuilt with the new piers being supported by the subway walls or built immediately adjacent thereto.

The magnitude of cost for removal and replacement of the Tremont-Arlington St. bridge will approximate $450,000 to $550,000. This does not include costs of constructing the subway section in this area.

Very truly yours,

CHAS. T. MAIN, INC.

By

H. D. Smith

NAME [illegible]
SUBJECT [illegible] Extension

JOB 24_5 E SHEET SK-1
DRAWN [illegible] CHECKED

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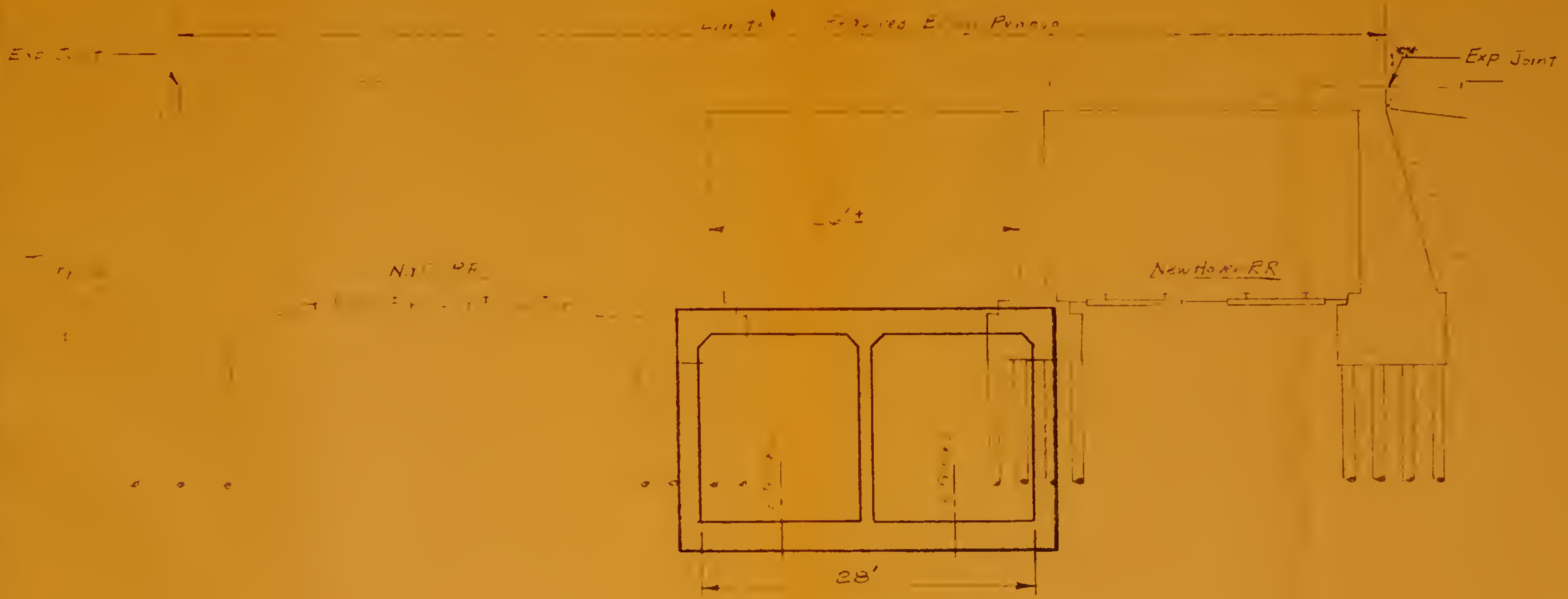

SECTION AT TREMONT-ARLINGTON BRIDGE

Scale: [illegible]'-0"

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